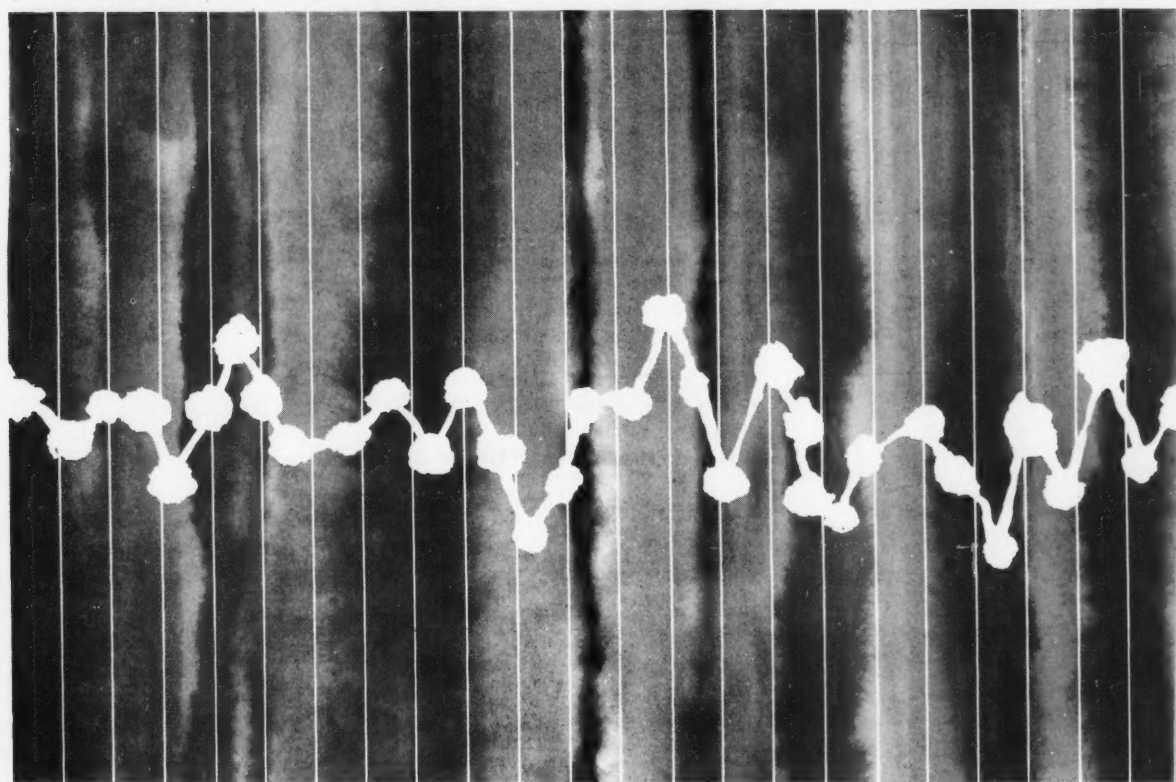


DOCUMENTS

# defense indicators

DECEMBER 1977



U.S. DEPARTMENT OF COMMERCE • BUREAU OF ECONOMIC ANALYSIS

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This report is prepared in the Statistical Indicators Division, Bureau of Economic Analysis. Technical staff and their responsibilities for the publication are—

**Barry A. Beckman**—Technical supervision and review.

**Morton Somer**—Selection of seasonal adjustment methods.

**Betty F. Tunstall**—Collection and compilation of basic data.

The cooperation of various Government agencies which provide data is gratefully acknowledged.

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The Secretary of Commerce has determined that the publication of this periodical is necessary in the transaction of the public business required by law of this Department. Use of funds for printing this periodical has been approved by the Director of the Office of Management and Budget through September 1, 1980.

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## **U.S. DEPARTMENT OF COMMERCE**

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# defense indicators

December 1977  
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## **6 BEA PROJECTS** for economic analysis

### **BUSINESS CONDITIONS DIGEST** A monthly report for analyzing economic fluctuations over a short span of years.

This report brings together many of the economic time series found most useful by business analysts and forecasters. The dominant feature is the cyclical indicators section in which approximately 110 business cycle indicators are each assigned a three-way timing classification according to their cyclical behavior at peaks, at troughs, and at all turns. This section also contains other valuable aids for the analysis of business conditions and prospects, such as composite indexes of leading, coincident, and lagging indicators and various diffusion indexes. A second section contains other important economic measures such as prices, wages, productivity, government activities, U.S. international transactions, and international comparisons.

Data are presented in charts and tables. Appendixes provide historical data, series descriptions, seasonal adjustment factors, and measures of variability. A computer tape containing data for most of the series is available for purchase.

### **DEFENSE INDICATORS** A monthly report for analyzing the current and prospective impact of defense activity on the national economy.

This report brings together the principal time series on defense activities which influence short-term changes in the national economy. These include series on obligations, contracts, orders, shipments, inventories, expenditures, employment, and earnings. The approximately 60 time series included are grouped in accordance with the time at which the activities they measure occur in the defense order-production-delivery process. Charts and analytical tables facilitate interpretation.

### **LONG TERM ECONOMIC GROWTH** A report for the study of economic trends over a long span of years, 1860-1970.

This report has been developed from available statistics to provide a comprehensive, long-range view of the U.S. economy. It is a basic research document for economists, historians, investors, teachers, and students. It brings together under one cover, in meaningful and convenient form, the complete statistical basis for a study of long-term economic trends. A computer tape file of the time series included in the report is available for purchase.

### **COMPUTER PROGRAMS FOR TIME SERIES ANALYSIS** The source statements for FORTRAN IV programs used by BEA in its analysis of time series are available on a single computer tape.

**SEASONAL ADJUSTMENT PROGRAMS.**—Two variants of the Census computer program for measuring and analyzing seasonal, trading-day, cyclical, and irregular fluctuations. They are particularly useful in analyzing economic fluctuations which take place within a year. The X-11 variant is used for adjusting monthly data and the X-11Q for quarterly data. These programs make additive as well as multiplicative adjustments and compute many summary and analytical measures.

**DIFFUSION INDEX PROGRAM.**—A computer program for computing diffusion indexes, cumulated diffusion indexes, and summary measures of the properties of each index.

### **SURVEY OF CURRENT BUSINESS** A monthly report for analyzing current economic developments.

This report provides a useful combination of current data for more than 2,500 statistical series and significant articles analyzing economic developments. These data and analyses include such areas as the national income and product accounts, the balance of payments accounts, plant and equipment expenditures, regional personal income, and the input-output accounts.

### **BUSINESS STATISTICS** A biennial reference volume containing statistical series reported currently in the *Survey of Current Business*.

This report provides historical data back to 1947 for nearly 2,500 time series. The series are accompanied by concise descriptions as to their composition, methods of compilation, comparability, revisions, and availability. Also listed are the names and addresses of organizations which provide the basic data for the series.



## Introduction

The purpose of this monthly report is to bring together the principal time series on defense activity which influence short-term changes in the national economy. These include series on obligations, contracts, orders, shipments, inventories, expenditures, employment, and earnings. Most are monthly but a few quarterly series are included. The series numbers used are for identification purposes only and do not reflect relationships or order.

### Classification of Series

Chart 1 compares Government purchases of goods and services for national defense with total gross national product. GNP is the market value of the final output of goods and services produced by the Nation's economy and represents a very broad measure of aggregate economic activity. In addition to national defense purchases, it includes Federal Government purchases of goods and services for nondefense purposes, State and local government purchases, personal consumption expenditures, gross private domestic investment, and net exports of goods and services. Chart 1 also presents national defense purchases as a percent of gross national product and, for both series, changes from the previous quarter.

A related group of series is shown in Chart 4, "Defense Related Balance of Payments Components." These series show the effects of defense-related economic activity on the balance of payments accounts.

The remaining series are grouped in accordance with the time at which the activities they measure occur within the defense order-production-delivery process. Those series measuring activities that usually precede production, such as new orders placed with defense products industries and contract awards, are presented in Chart 2, "Advance Indicators of Defense Activity." Chart 3, "Intermediate and Final Indicators of Defense Activity," presents series that measure activities which tend to move at the same time as production (such as employment) and activities which usually follow production (such as shipments).

### Series Included

Following is a list of the series as they appear in charts 1, 2, 3, and 4 (the source agencies are abbreviated in parentheses; detailed lists of sources for charts 1, 2, and 3 appeared as appendices to the August and October 1968 issues of this report).

#### Gross National Product and National Defense Purchases

- Gross national product (BEA)
- Federal Government purchases of goods and services, national defense (BEA)
- National defense purchases as a percent of gross national product (BEA)
- Gross national product, changes from previous quarter (BEA)
- National defense purchases, changes from previous quarter (BEA)

#### Advance Indicators of Defense Activity

- Defense Department gross obligations incurred, total (DOD)
- Defense Department gross obligations incurred, procurement (DOD)
- Gross obligations incurred outside the Government for national defense (Treasury)

- Defense Department military prime contract awards for work performed in the United States (DOD)
- Defense Department gross unpaid obligations outstanding (DOD)
- Manufacturers' new orders (Census):
  - Defense products industries
  - Defense products
- Manufacturers' new orders from the U.S. Government, aerospace industries (Census):
- Average weekly overtime hours, production workers, defense products industries (BLS)
- Accession rate, defense products industries (BLS)
- Layoff rate, defense products industries (BLS)

#### Intermediate and Final Indicators of Defense Activity

- Output of defense and space equipment (FRB)
- Manufacturers' inventories (Census):
  - Defense products industries
  - Defense products
- Manufacturers' unfilled orders (Census):
  - Defense products industries
  - Defense products
- Manufacturers' unfilled orders from the U.S. Government, aerospace industries (Census)
- Defense Department progress payments outstanding (DOD)
- Employment in defense products industries, total (BLS)
- Employment in defense products industries, production workers (BLS)
- Index of aggregate weekly hours, defense products industries (BLS)
- Index of aggregate weekly payrolls, production workers, defense products industries (BLS)
- Defense Department personnel, military, active duty (DOD)
- Defense Department personnel, civilian, direct hire employment (DOD)
- Defense Department net outlays, total, military functions and military assistance (DOD)
- Defense Department net outlays, procurement (DOD)
- Budget outlays for the national defense function (Treasury)
- Defense Department personnel compensation (DOD)
- Manufacturers' shipments (Census):
  - Defense products industries
  - Defense products
- Manufacturers' shipments to the U.S. Government, aerospace industries (Census)
- Ratio, manufacturers' unfilled orders to shipments (Census):
  - Defense products industries
  - Defense products
- Ratio, manufacturers' inventories to shipments (Census):
  - Defense products industries
  - Defense products

#### Defense-Related Balance of Payments Components

- Transfers under U.S. military agency sales contracts—exports (BEA)
- Direct defense expenditures—imports (BEA)
- U.S. Government cash receipts associated with military sales contracts (BEA)

Some additional data are included in the tables though not presented in the charts. These include Defense Department military prime contract awards by procurement category (e.g., for aircraft, missiles and space systems, ships, weapons, and munitions), the operations component of Defense Department

gross obligations incurred, gross unpaid obligations outstanding, and net outlays and the procurement component of gross unpaid obligations outstanding.

### Description of Basic Data

The Department of Defense compiles statistics on obligations, contract awards, personnel compensation, and outlays. The DOD obligations and outlays data are based on the Defense Department's monthly *Status of Funds* report which is developed from accounting data and is designed to provide information on the total status of Defense Department financing. Accounts included in this report are aggregated by appropriation categories including personnel costs, operations and maintenance, procurement, research and development, and construction. The *Status of Funds* report duplicates some obligations. That is, obligations of one government unit to another unit are not netted out.

The Defense Department's *Contract Awards* report covers the awarding of procurement contracts. These include obligations for operating and maintenance supplies, equipment and services, research and development, and construction in addition to the obligations for items that constitute the fiscal "procurement" category. The statistics are aggregated by commodity categories including aircraft, missile and space systems, ships, weapons, ammunition, electronics and communication equipment, fuels, and textiles and clothing. The *Contract Awards* report includes procurement for NASA, other nondefense agencies, and the Foreign Military Sales Program which are not included in the *Status of Funds* report.

The Census quarterly new orders, unfilled orders and shipments series for "aerospace industries" are based on reports of companies classified into the following industry categories:

Industry	SIC Code
Aircraft and parts .....	372
Guided missiles and space vehicles, completely assembled ..	1925

The Census and BLS data for "defense products industries" presented in this report cover companies and establishments<sup>1</sup> classified into the following industry categories in accordance with the *Standard Industrial Classification Manual*, 1967 edition, Executive Office of the President, Bureau of the Budget:

Industry	SIC Code
Ordnance and accessories .....	19
Communication equipment .....	366
Aircraft and parts .....	372

Establishments reporting to the BLS are classified into industries on the basis of their principal product or activity as determined from information on annual sales volume, which is collected each year on a supplement to the monthly report. The entire employment of an establishment making more than one product or engaging in more than one activity is included under the industry accounting for the largest percentage of the annual sales of that establishment.

The Census Bureau's monthly survey is based primarily on reports at the company level and the monthly estimates are benchmarked to the establishment data from the *Annual Survey*

of Manufactures. Also, many of the large diversified companies file separate divisional reports monthly. Although the reports in the survey are also classified according to their principal product or activity, this difference in the organizational level from which reports are received results in firms being classified into different industries in the BLS and Census surveys and, consequently, limits somewhat the comparability of the data collected by these agencies. However, as we know from past studies in this area, some differences in industrial classification between BLS and Census data would remain even if reports came from the same organizational levels.

Both the Census and the BLS data include a significant amount of nondefense activities carried on by companies and establishments classified in the above industries. For example, the data cover the production of commercial as well as military aircraft. On the other hand, they exclude significant amounts of defense work carried on by companies and establishments classified in industries other than those listed above (e.g., the manufacture of military uniforms and the shipbuilding industry).<sup>2</sup>

Census data for "defense products" are based on separate reports on defense work filed by large defense contractors in the ordnance, communications, complete aircraft, aircraft parts, and shipbuilding industries. Thus, they differ from the "defense products industries" data in that they include defense activity in the shipbuilding industry and exclude nondefense work in the other industries covered. Defense products data cover work for the Department of Defense and exclude contracts for the National Aeronautics and Space Administration and the Atomic Energy Commission.

The DOD data are not strictly comparable in coverage with either the BLS or the Census data since the Defense Department figures (1) cover products of industries not included in the defense products category; (2) generally do not include non-defense activities (except that some series, such as contract awards, include activities by the Department of Defense on behalf of nondefense agencies); and (3) do not cover intermediate activities such as those related to subcontracting and supplying of parts. Thus, the Census Bureau data for manufacturers' new orders and shipments of defense products industries, for example, differ in coverage from the DOD contract awards and net outlays series.

The Department of Defense data are not comparable with Federal Government purchases of goods and services for national defense or the Treasury Department obligations and outlays data since the BEA and Treasury data cover defense-related activities of other agencies such as the Atomic Energy Commission, the Selective Service System, and the Office of Emergency Planning.

Projects to improve the comparability of the data collected by the Bureau of the Census, the Bureau of Labor Statistics, and the Department of Defense and to improve the separation of defense and nondefense activity for the Census and BLS data are being undertaken by the statistical agencies under the leadership of the Interagency Committee mentioned earlier in this report.

<sup>2</sup>See the Bureau of the Census publication *Shipments of Defense-Oriented Industries*, Current Industrial Reports, Series MA-175, for annual estimates of shipments by industry to the Department of Defense, the National Aeronautics and Space Administration, and the Atomic Energy Commission. Included also are industries not covered by the "defense products industries" category.

<sup>1</sup>An establishment is a single physical location where business is conducted (e.g., a plant). A company often includes more than one establishment.

## Variability of Data

Seasonal variations dominate the movements of many time series, and adjustments for average seasonal fluctuations are often necessary to bring out the underlying trends of the series. These seasonal adjustments allow for the effects of repetitive intrayear variations resulting primarily from normal differences in weather conditions and from various institutional arrangements. An additional adjustment is sometimes necessary for series which contain considerable variation resulting from the number of working or trading days in each month. As used in this report, the term "seasonal adjustment" includes trading-day adjustments where they have been made.

Most of the series in this report are shown in seasonally adjusted form. For Defense Department and BLS series, unadjusted data are also shown since they are not readily available elsewhere. Current seasonal adjustment factors are shown in appendix A.

The effect of seasonal adjustment in reducing the month-to-month variation in the data can be seen in appendix B. There, the first two columns show the average month-to-month percent change (without regard to sign) in the data before and after seasonal adjustment. Some series still show very irregular month-to-month movements after adjustment for seasonal variation. The measures in appendix B also indicate the month-to-month variation in the irregular and short-term trend components of the series. For many series, irregular movements tend to dominate 1- or 2-month comparisons, and the underlying short-term trend becomes dominant in comparisons over longer spans. The "months for cyclical dominance" (MCD) measure estimates the span of months required for the short-term trend to dominate the irregular component. Series with an MCD of 4 or more are supplemented with a moving average (with the

number of terms equal to MCD) in the charts. Data for these moving averages are listed in the basic data tables.

## Guide to Charts and Tables

Most series are plotted on a standard ratio scale so that equal percent changes cover the same vertical distance. For these series, an increase of 100 percent covers approximately 1 inch. Arithmetic scales are used for series with zero or negative data, series which could approach zero (e.g. average overtime hours and layoff rate), and series expressed in percent.

In general, monthly data are plotted with a solid line and quarterly data are represented by a solid line with quarterly plot points. Quarterly series are also identified with a "Q" after their titles. For series which include a moving average, a dashed line is used for the actual monthly data and a solid line for the moving average. (The moving average values are centered within the span of months they are computed from.) Exceptions to this scheme may be necessary for special situations. Data apply to the whole period except for series designated "EOM" (end of month) or "EOQ" (end of quarter). The number in the box at the right of each series indicates the latest month (Arabic) or quarter (Roman) plotted. Parallel lines across a series indicate a break in continuity (e.g. data not available or change in series definition).

Tables 1, 2, 3, and 4 present current data for the series shown in the charts, including the moving averages. They also include unadjusted data for some series and data for related series which are not plotted. Table A summarizes the most recent data and percent changes for many of the series in the report. Historical data are shown on an intermittent basis in appendix C. (The index indicates the appropriate issue for each series.)

## New Features and Changes for This Issue

1. Current seasonal adjustment factors, which are based on historical data patterns, are inaccurate for some defense series because of the change in the Government's fiscal year, and suitable seasonal factors cannot be established at this time. For this reason, seasonally adjusted data are not shown for Defense Department gross obligations incurred (series 617, 619, and 621), Gross obligations incurred outside the Federal Government for national defense (series 623), and Defense Department military prime contract awards total (series 625) for the period since May 1977; nor are they shown for the components of military prime contract awards (series 626, 627, 629-637, and 640) for the period since the first quarter 1977. For these series, unadjusted data are shown in the data tables and seasonal adjustment factors on the old basis are shown in appendix A.

2. Appendix C contains historical data for series 643-645 and 680-682.

The January issue of *DEFENSE INDICATORS* is scheduled for release on January 31.



# Table A. Summary of Recent Data and Current Percent Changes for Principal Defense Indicators

(Preliminary and revised figures are not identified here but the user may consult tables 1, 2, 3, and 4 where such identification is given)

Series title	Unit of measure	Basic data									Percent change				Series number
		Average		1st Q 1977	2d Q 1977	3d Q 1977	Sept. 1977	Oct. 1977	Nov. 1977	Sept. '77 to Oct. '77	Oct. '77 to Nov. '77	1st Q '77 to 2d Q '77	2d Q '77 to 3d Q '77		
		1975	1976												
GROSS NATIONAL PRODUCT AND NATIONAL DEFENSE PURCHASES															
200. Gross national product (BEA) .....	Ann. rate, bil. dol. ....	1528.8	1706.5	1810.8	1869.9	1915.9	...	...	...	...	...	3.3	2.5	200	
284. Federal Government purchases of goods and services, national defense (BEA) .....	do .....	83.9	86.8	89.7	93.4	95.6	...	...	...	...	...	4.1	2.4	264	
613. National defense purchases as a percent of GNP (BEA) <sup>1</sup> .....	Percent .....	5.5	5.1	5.0	5.0	5.0	...	...	...	...	...	0.0	0.0	613	
ADVANCE INDICATORS OF DEFENSE ACTIVITY															
Defense Dept. gross obligations incurred (DOD): 617. Total .....	Ann. rate, bil. dol. ....	98.5	109.9	117.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	617	
621. Procurement .....	do .....	20.4	24.6	24.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	621	
623. Gross obligations incurred outside the Federal Government for national defense (Treasury) .....	do .....	104.1	117.9	126.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	623	
626. Defense Department military prime contract awards for work performed in the U.S. (DOD) .....	do .....	43.3	50.1	51.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	625	
643. Defense Department gross unpaid obligations outstanding (DOD) .....	Bil. dol., end of period .....	41.3	50.1	52.4	53.3	48.7	48.7	53.1	NA	9.0	NA	1.7	-8.6	643	
648. Mfrs.' new orders, defense products (Census) .....	Ann. rate, bil. dol. ....	25.2	29.5	24.2	36.3	22.2	19.6	51.2	44.8	161.2	-12.5	50.0	-38.8	648	
650. Manufacturers' new orders from the U.S. Government, aerospace industries (Census) .....	do .....	18.3	21.2	18.0	25.7	NA	...	...	...	...	...	42.8	NA	650	
653. Average weekly overtime hours, production workers, defense products industries (BLS) <sup>1</sup> .....	Hours .....	2.5	2.5	2.8	3.0	2.9	3.2	3.1	NA	-0.1	NA	0.2	-0.1	653	
654. Accessions, defense products industries (BLS) <sup>1</sup> .....	Number per 100 employees .....	1.4	1.6	2.3	2.2	1.8	1.8	NA	NA	NA	NA	-0.1	-0.4	654	
655. Layoffs, defense products industries (BLS) <sup>1</sup> .....	do .....	1.2	0.7	0.5	0.4	0.6	0.6	NA	NA	NA	NA	-0.1	0.2	655	
INTERMEDIATE AND FINAL INDICATORS OF DEFENSE ACTIVITY															
657. Output of defense and space equipment (FRB) .....	1967=100 ....	80.0	78.4	78.3	80.1	80.7	80.9	79.3	79.0	-2.0	-0.4	2.3	0.7	657	
658. Mfrs.' inventories, defense products (Census) .....	Bil. dol., end of period .....	6.6	6.6	6.5	6.9	6.9	6.9	6.6	NA	-4.3	NA	6.2	0.0	659	
661. Mfrs.' unfilled orders, defense products (Census) .....	do .....	29.2	32.2	30.4	31.9	29.8	29.8	31.5	32.6	5.7	3.5	4.9	-6.6	661	
664. Manufacturers' unfilled orders from the U.S. Government, aerospace industries (Census) .....	do .....	21.8	21.7	23.0	24.3	NA	...	...	...	...	...	5.7	NA	664	
666. Defense Department progress payments outstanding (DOD) .....	do .....	11.3	8.5	8.5	8.7	7.8	...	...	...	...	...	2.4	-10.3	666	
Employment in defense products industries (BLS): 670. Total .....	Thousands .....	1,118	1,064	1,066	1,081	1,087	1,084	1,045	NA	-3.6	NA	1.4	0.6	670	
671. Production workers .....	do .....	570	531	529	540	545	545	518	NA	-5.0	NA	2.1	0.9	671	
673. Index of aggregate weekly hours, defense products industries (BLS) .....	1967=100 ....	66.0	62.8	63.4	64.4	64.8	64.6	62.3	NA	-3.6	NA	1.6	0.6	673	
675. Index of aggregate weekly payrolls, production workers, defense products industries (BLS) .....	do .....	100.5	101.2	107.2	112.6	115.4	116.4	109.7	NA	-5.8	NA	5.0	2.5	675	
Defense Department personnel (DOD): 677. Military, active duty .....	Thousands, end of period .....	2,084	2,072	2,075	2,075	2,075	2,075	2,072	2,069	-0.1	-0.1	0.0	0.0	677	
678. Civilian, direct hire employment .....	do .....	1,028	995	995	1,009	982	982	983	NA	0.1	NA	1.4	-2.7	678	
Defense Department net outlays (DOD): 680. Total, military functions and military assistance .....	Ann. rate, bil. dol. ....	88.5	88.3	95.6	93.9	105.1	107.3	97.1	102.9	-9.5	6.0	-1.8	11.9	680	
682. Procurement .....	do .....	16.2	16.4	18.5	17.4	18.8	16.7	18.0	24.2	7.8	34.4	-5.9	8.0	682	
683. Budget outlays for the national defense function (Treasury) .....	do .....	92.5	89.1	96.7	95.2	107.7	108.9	99.5	104.4	-8.6	4.9	-1.6	13.1	683	
685. Defense Dept. personnel compensation (DOD) .....	do .....	34.6	35.5	36.1	37.2	37.3	37.6	38.7	NA	2.9	NA	3.0	0.3	685	
688. Mfrs.' shipments, defense products (Census) .....	do .....	23.7	26.5	31.5	30.5	30.6	30.8	30.5	31.2	-1.0	2.3	-3.2	0.3	688	
689. Manufacturers' shipments to the U.S. Government, aerospace industries (Census) .....	do .....	17.3	19.1	21.1	20.2	NA	...	...	...	...	...	-4.3	NA	689	
691. Ratio, manufacturers' unfilled orders to shipments, defense products (Census) .....	Ratio .....	14.5	13.5	11.8	12.5	12.0	11.6	12.4	12.6	6.9	1.6	5.9	-4.0	691	
693. Ratio, manufacturers' inventories to shipments, defense products (Census) .....	do .....	3.1	3.0	2.5	2.6	2.7	2.7	2.6	NA	-3.7	NA	4.0	3.8	693	
DEFENSE-RELATED BALANCE OF PAYMENTS COMPONENTS															
546. Transfers under U.S. military agency sales contracts—exports (BEA) <sup>1</sup> .....	Ann. rate, mil. dol. ....	3,919	5,213	7,380	6,856	8,032	...	...	...	...	...	-524	1,176	546	
547. Direct defense expenditures—imports (BEA) <sup>1</sup> .....	do .....	4,795	4,847	5,316	5,612	5,724	...	...	...	...	...	296	112	547	
686. U.S. Government cash receipts associated with military sales contracts (BEA) <sup>1</sup> .....	do .....	4,587	8,213	7,968	7,532	7,820	...	...	...	...	...	-436	288	696	

NOTE: This table is presented as a convenient summary of the current data for many of the indicators in this report. In many cases, data shown here are rounded to fewer digits or are in different units than those shown in tables 1, 2, 3, and 4. Where available, annual figures are those published by the source agencies; otherwise they (and the quarterly figures for monthly series) are averages or totals of the data as shown in the data tables. Series are seasonally adjusted except for those indicated by <sup>1</sup>, which appear to contain no seasonal movement.

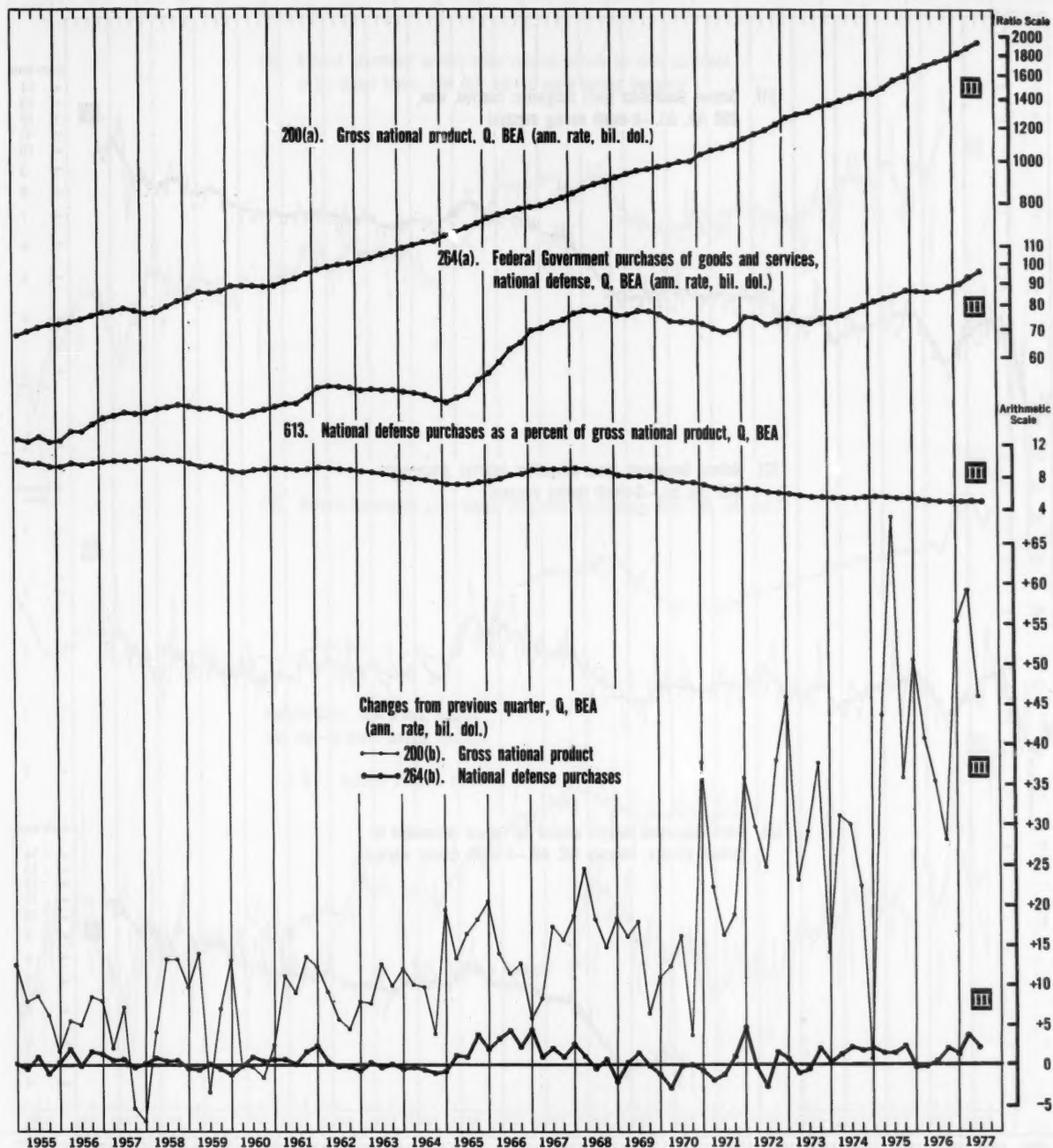
NA = not available.

<sup>2</sup>Differences rather than percent changes are shown for this series.

CHART

1

# Gross National Product and National Defense Purchases

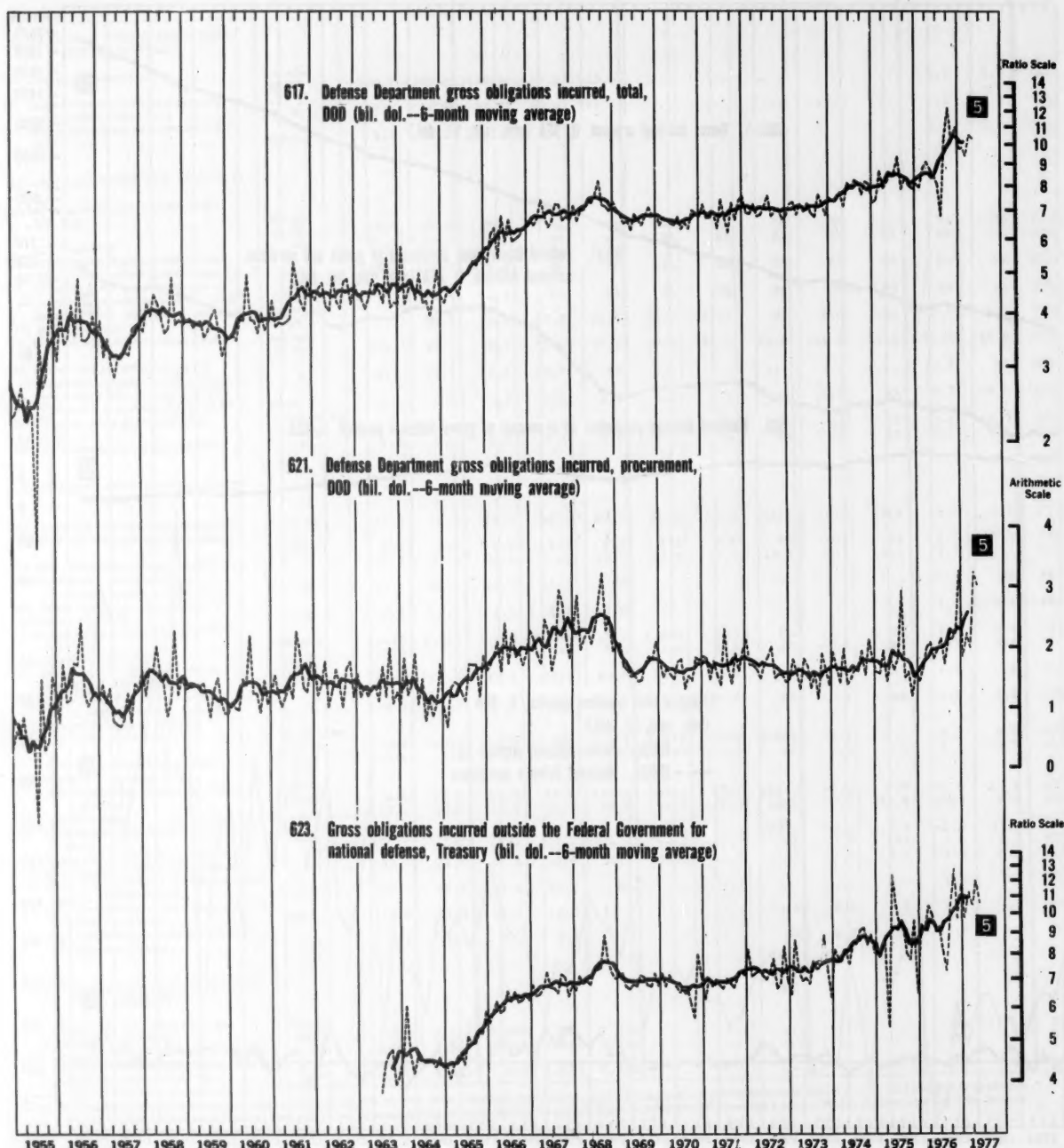




CHART

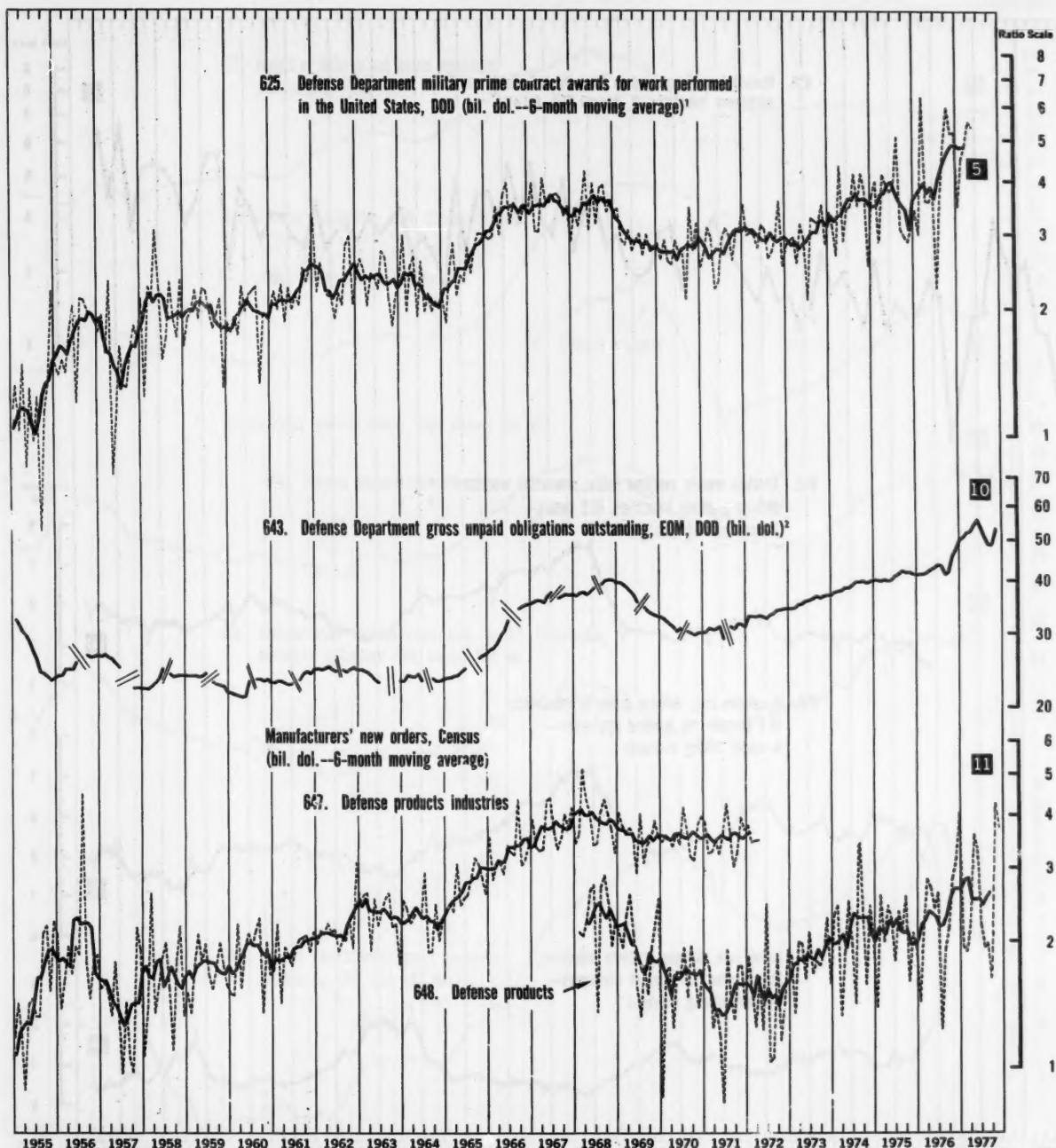
2

# Advance Indicators of Defense Activity



Current data for these series are shown on pages 15 and 16.

# Advance Indicators of Defense Activity--Continued



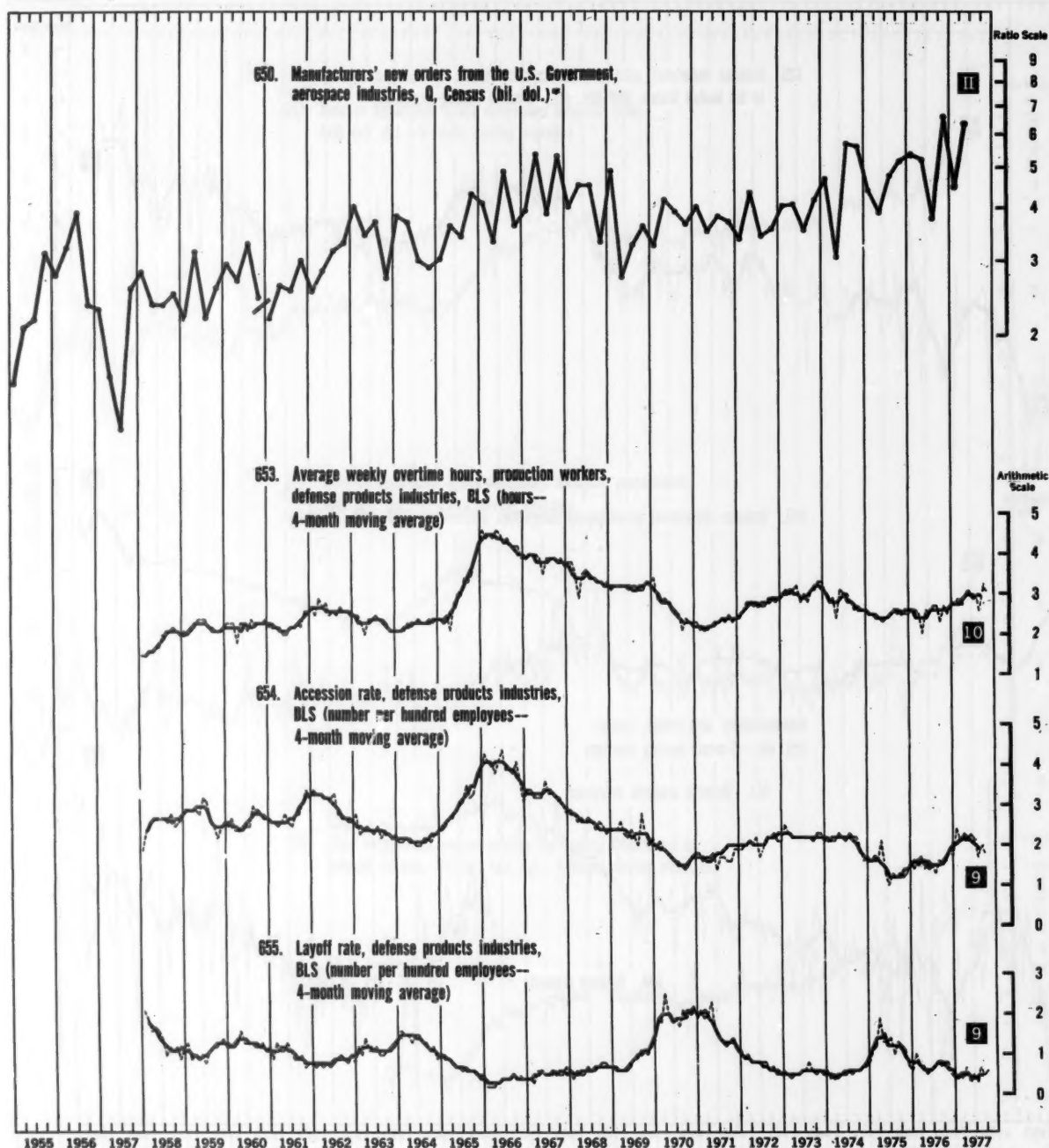
<sup>1</sup>Data prior to July 1955 exclude orders written to other Government agencies.

<sup>2</sup>Data for the following months not available: July of 1956-71; August of 1956-57 and 1963-66; September of 1957, 1963, and 1965; and October and November of 1963. Current data for these series are shown on pages 16 and 20.

CHART

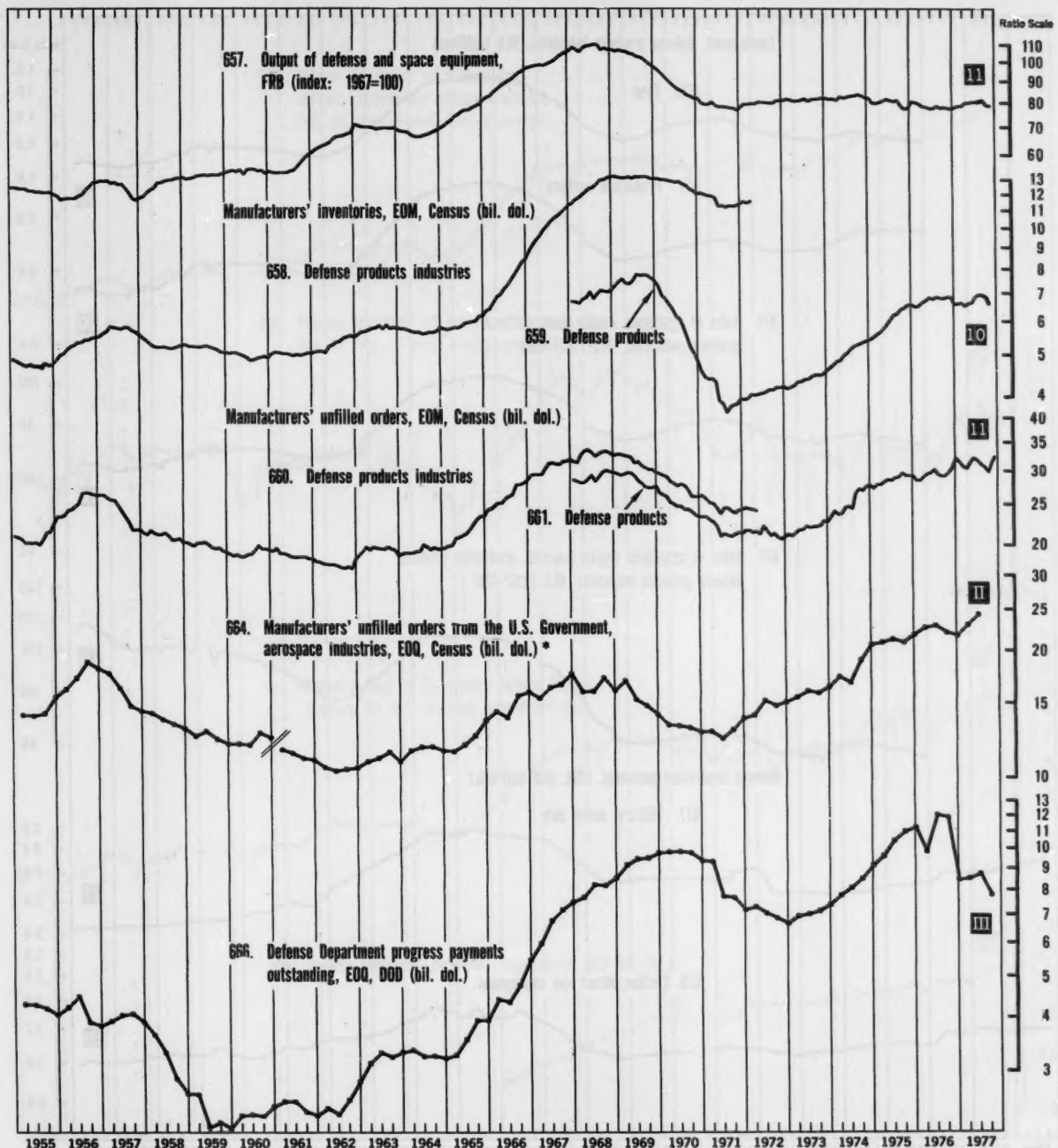
2

# Advance Indicators of Defense Activity--Continued



\*Data prior to 1961 include orders from non-Government customers.  
Current data for these series are shown on pages 20 and 21.

# Intermediate and Final Indicators of Defense Activity

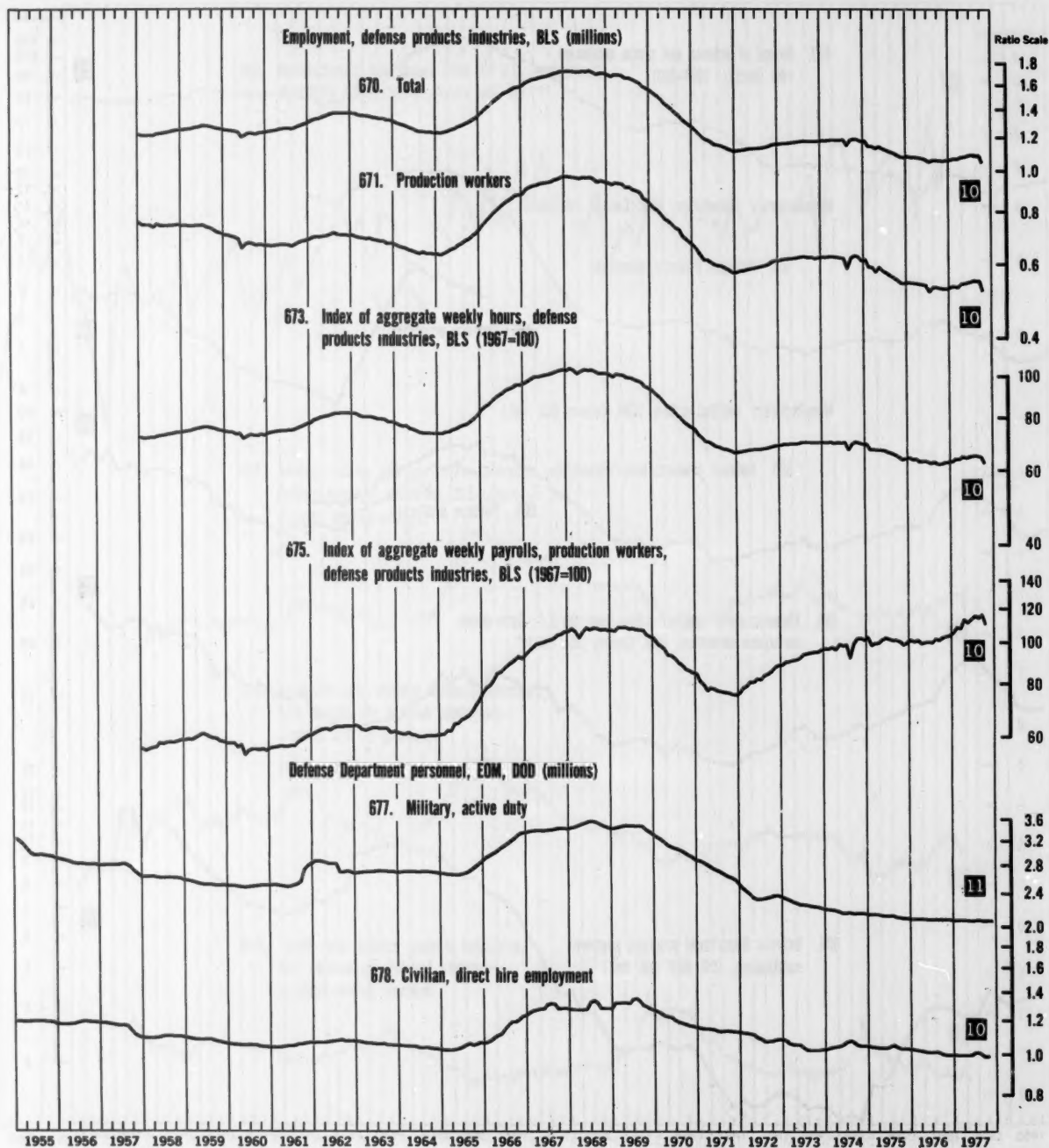


\* Data prior to 1961 include orders from non-Government customers.  
Current data for these series are shown on page 22.

CHART

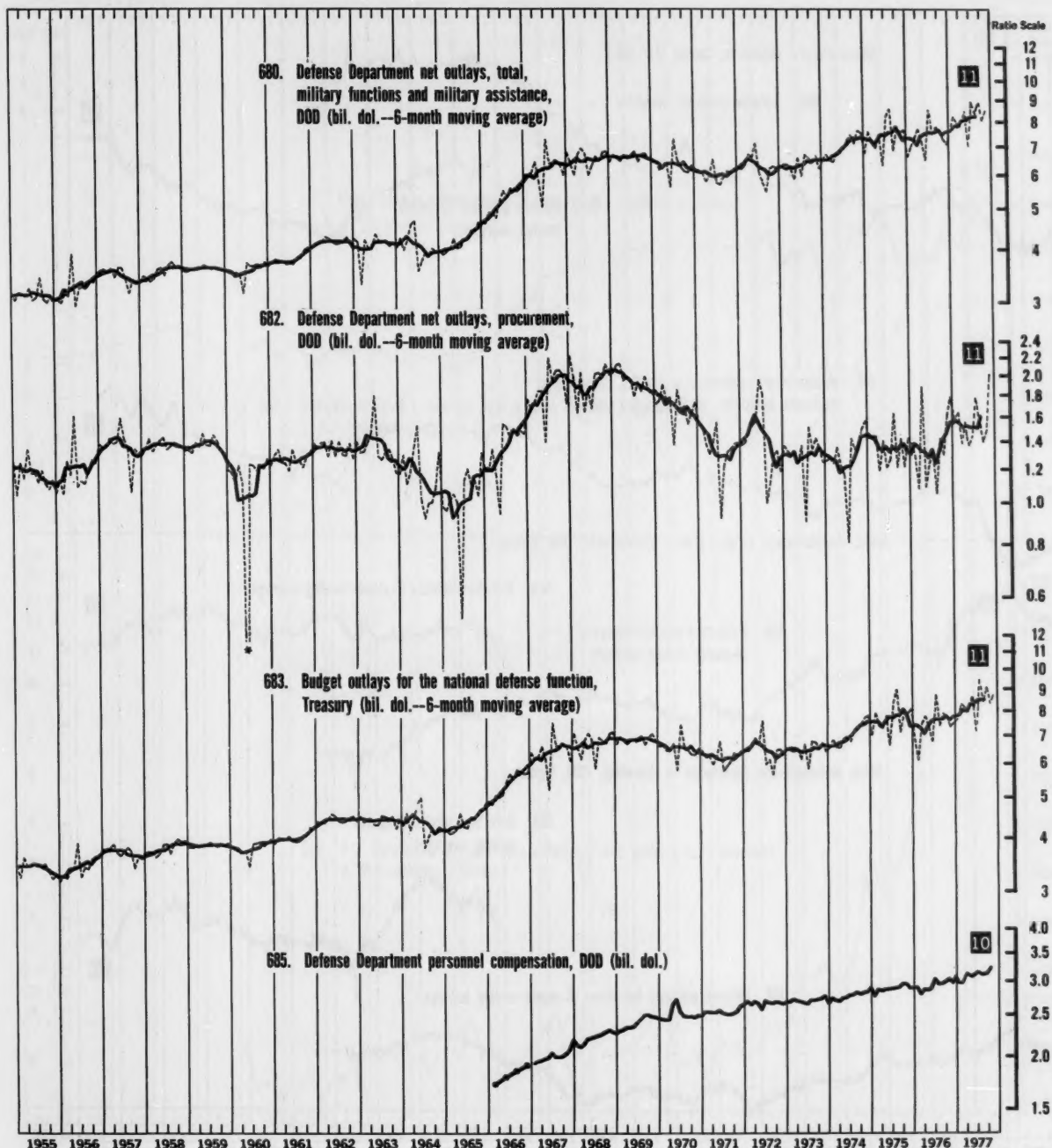
3

# Intermediate and Final Indicators of Defense Activity--Continued





# Intermediate and Final Indicators of Defense Activity--Continued

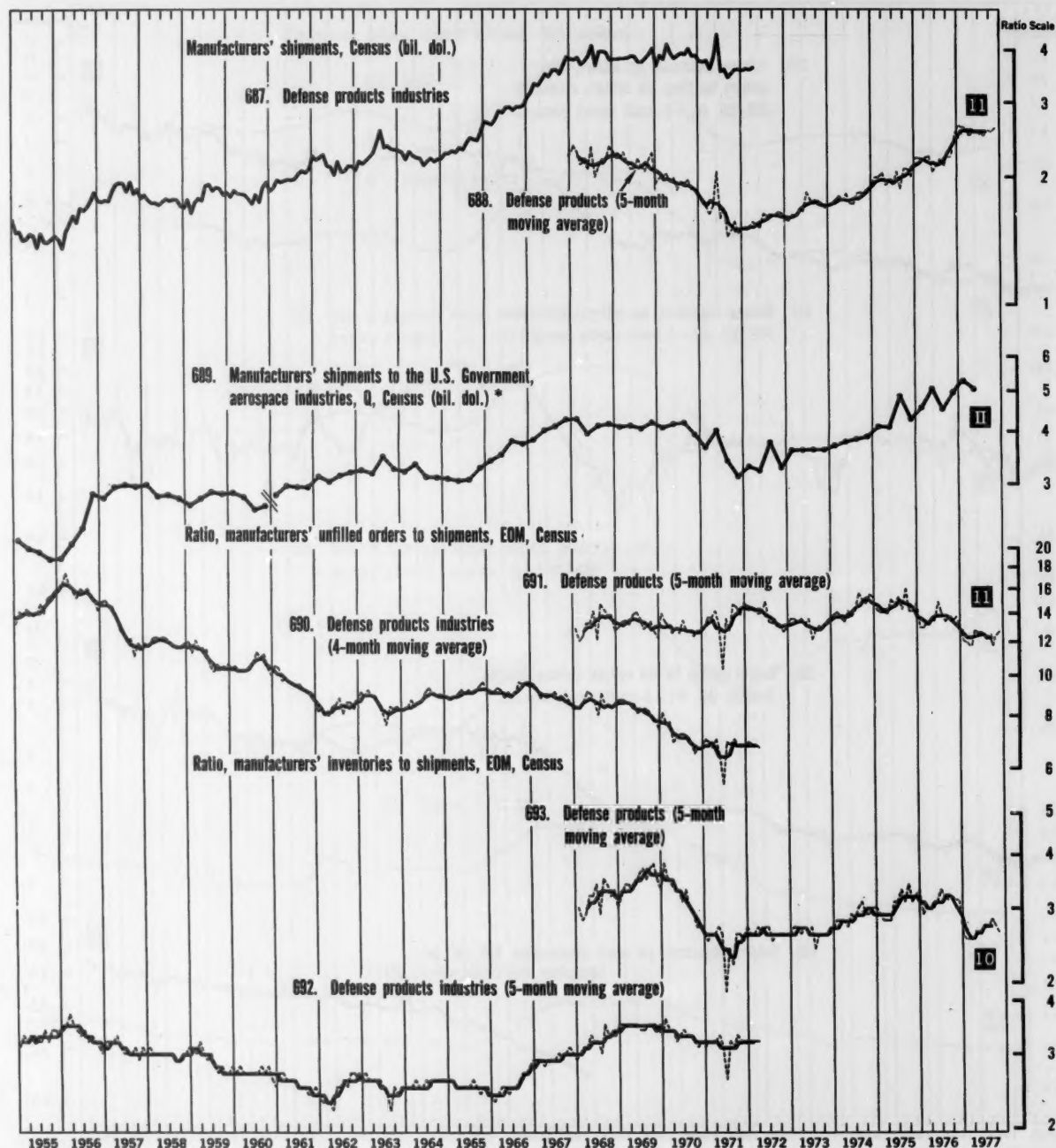


\*Net expenditures for procurement, June 1960--\$245 million.  
Current data for these series are shown on pages 24 and 25.

CHART

3

# Intermediate and Final Indicators of Defense Activity--Continued

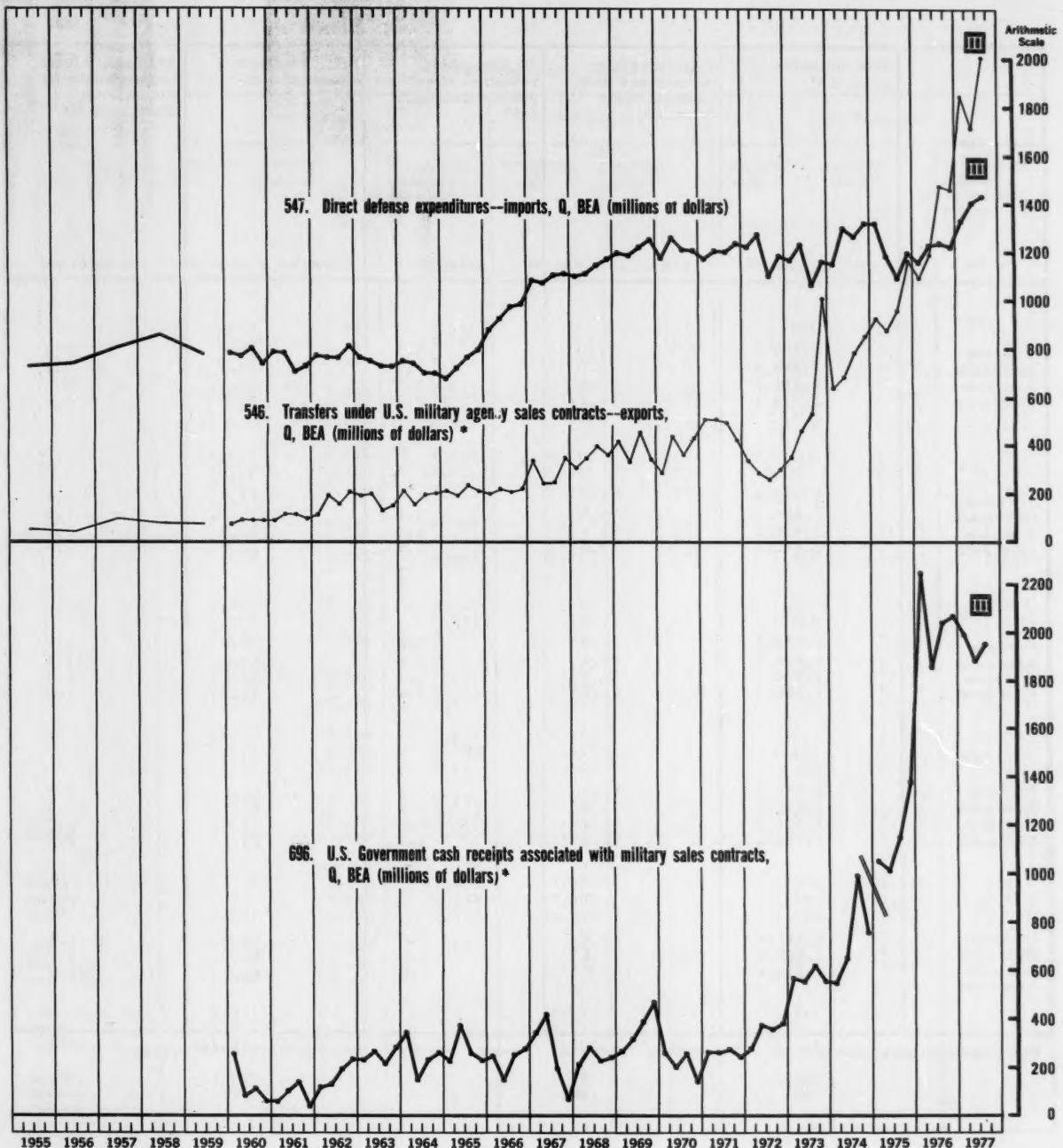


\*Data prior to 1961 include shipments to non-Government customers.  
Current data for these series are shown on page 26.

CHART

4

# Defense-Related Balance of Payments Components



\*See footnotes 1 and 2 on page 27.  
Current data for these series are shown on page 27.

# defense indicators

TABLE

1

## Gross National Product and National Defense Purchases

Year and quarter	200(a). Gross national product, BEA*	264(a). Federal Government purchases of goods and services, national defense, BEA*	613. National defense purchases as a percent of gross national product, BEA*	200(b). Change in gross national product, BEA*	264(b). Change in Federal Government purchases of goods and services, national defense, BEA*
	(Ann. rate, bil. dol.)	(Ann. rate, bil. dol.)	(Percent)	(Ann. rate, bil. dol.)	(Ann. rate, bil. dol.)
1973					
First quarter . . . . .	1,265.3	74.1	5.9	45.9	0.8
Second quarter . . . . .	1,288.4	73.1	5.7	23.1	-1.0
Third quarter . . . . .	1,317.5	72.5	5.5	29.1	-0.6
Fourth quarter . . . . .	1,355.1	74.4	5.5	37.6	1.9
1974					
First quarter . . . . .	1,369.0	74.6	5.4	13.9	0.2
Second quarter . . . . .	1,400.1	75.8	5.4	31.1	1.2
Third quarter . . . . .	1,430.1	77.9	5.4	30.0	2.1
Fourth quarter . . . . .	1,452.4	79.6	5.5	22.3	1.7
1975					
First quarter . . . . .	1,453.0	81.6	5.6	0.6	2.0
Second quarter . . . . .	1,496.6	83.0	5.5	43.6	1.4
Third quarter . . . . .	1,564.9	84.4	5.4	68.3	1.4
Fourth quarter . . . . .	1,600.7	86.7	5.4	35.8	2.3
1976					
First quarter . . . . .	1,651.2	86.3	5.2	50.5	-0.4
Second quarter . . . . .	1,691.9	86.0	5.1	40.7	-0.3
Third quarter . . . . .	1,727.3	86.4	5.0	35.4	0.4
Fourth quarter . . . . .	1,755.4	88.4	5.0	28.1	2.0
1977					
First quarter . . . . .	1,810.8	89.7	5.0	55.4	1.3
Second quarter . . . . .	1,869.9	93.4	5.0	59.1	3.7
Third quarter . . . . .	r1,915.9	r95.6	5.0	r46.0	r2.2
Fourth quarter . . . . .					

Note: All data on this page are seasonally adjusted. NA=not available; p=preliminary; r=revised; e=estimated. \*Indicates series shown in charts. (See page 5.)

## Advance Indicators of Defense Activity

Year and month	Defense Department gross obligations incurred, DOD							
	617. Total			619. Operations		621. Procurement		
	Not seasonally adjusted	Seasonally adjusted*	Moving average of seasonally adjusted data—6-month*	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted*	Moving average of seasonally adjusted data—6-month*
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)
1975								
January .....	8,252	7,341	7,916	5,471	5,148	1,895	1,603	1,772
February .....	6,904	7,467	7,958	4,604	5,220	1,569	1,575	1,755
March .....	7,526	8,677	7,956	4,787	5,251	1,994	1,960	1,701
April .....	7,403	7,933	8,033	5,424	5,209	1,147	1,448	1,674
May .....	6,796	8,199	8,246	4,761	5,121	1,147	1,813	1,711
June .....	11,027	8,583	8,569	6,275	5,560	2,693	1,644	1,939
July .....	9,903	8,614	8,440	6,641	5,624	1,510	1,827	1,865
August .....	9,812	9,406	9,516	5,337	5,327	2,508	2,940	1,891
September .....	7,705	7,907	8,494	5,203	5,442	1,506	1,515	1,790
October .....	9,045	8,387	9,385	6,130	5,660	1,733	1,605	1,784
November .....	6,976	8,069	8,304	4,829	5,334	1,320	1,206	1,722
December .....	7,156	7,925	8,064	4,895	5,373	1,428	1,612	1,511
1976								
January .....	8,652	9,132	8,220	6,010	5,729	1,697	1,453	1,594
February .....	7,206	7,962	8,344	4,745	5,203	1,664	1,672	1,676
March .....	8,241	8,842	8,461	4,995	5,354	2,093	2,014	1,779
April .....	8,677	9,134	8,556	5,946	5,784	1,688	2,096	1,841
May .....	6,825	8,772	8,553	4,828	5,419	1,155	1,828	1,958
June .....	11,319	8,491	8,365	5,949	5,059	3,218	1,983	1,971
July .....	9,593	8,116	8,628	6,362	5,369	1,812	2,157	1,993
August .....	7,427	6,833	9,148	5,055	5,010	1,458	1,747	2,003
September .....	9,840	10,424	9,412	6,120	6,335	2,152	2,147	2,075
October .....	12,635	12,255	9,831	7,447	7,012	2,312	2,157	2,289
November .....	9,620	10,355	10,120	5,561	6,145	2,497	2,258	2,237
December .....	9,903	11,003	10,641	5,341	5,882	2,855	3,270	2,316
1977								
January .....	9,838	9,848	10,480	6,352	6,114	2,138	1,842	2,289
February .....	8,737	9,963	10,216	5,501	6,223	2,206	2,219	2,471
March .....	8,957	9,458	10,230	5,537	5,928	2,086	1,987	2,599
April .....	10,092	10,668	(NA)	6,365	6,271	2,640	3,251	(NA)
May .....	10,141	10,437		5,344	5,984	1,908	3,024	
June .....	9,450	( <sup>1</sup> )		5,739	( <sup>1</sup> )	2,077	( <sup>1</sup> )	
July .....	8,331			6,195		1,249		
August .....	10,763			5,337		1,861		
September .....	11,642			6,517		3,511		
October .....	13,810			7,786		2,898		
November .....	(NA)			(NA)		(NA)		
December .....								

NA=not available; p=preliminary; r=revised; e=estimated. \*Indicates series shown in charts. (See page 6.)

<sup>1</sup>See "New Features and Changes for This Issue," page 3.



TABLE

2

# Advance Indicators of Defense Activity--Continued

Year and month	623. Gross obligations incurred outside the Federal Government for national defense, Treasury		Defense Department military prime contract awards for work performed in the United States, DOD						
			625. Total			626. Aircraft		627. Missile and space systems	
	Seasonally adjusted*	Moving average of seasonally adjusted data--6-month*	Not seasonally adjusted	Seasonally adjusted*	Moving average of seasonally adjusted data--6-month*	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)
1975									
January .....	8,069	8,422	3,567	3,693	3,494	1,062	...	346	...
February .....	8,271	7,894	3,321	3,987	3,488	509	1,873	276	1,206
March .....	8,590	8,472	2,625	2,817	3,513	421	...	244	...
April .....	5,335	p8,863	2,914	4,122	3,720	316	...	377	...
May .....	12,426	p9,084	2,713	3,926	3,744	386	1,524	242	1,451
June .....	p10,487	p9,259	6,626	3,773	3,925	732	...	537	...
July .....	9,397	p9,176	4,376	3,842	3,969	810	...	661	...
August .....	9,321	p9,592	5,295	5,072	3,776	1,254	2,413	1,070	1,465
September .....	8,092	p9,137	3,179	3,080	3,600	469	...	379	...
October .....	7,830	8,479	3,174	2,961	3,493	817	...	463	...
November .....	9,697	8,492	2,608	2,872	3,420	373	1,770	498	1,316
December .....	6,537	3,467	2,870	3,130	3,074	483	...	426	...
1976									
January .....	9,476	8,870	3,288	3,407	3,612	546	...	341	...
February .....	9,168	9,235	2,529	2,993	3,716	356	2,744	278	1,234
March .....	10,511	9,142	5,356	6,309	3,832	2,064	...	243	...
April .....	10,022	p9,616	2,600	3,586	3,946	326	...	290	...
May .....	9,137	p9,410	2,563	3,565	3,751	576	2,694	213	1,375
June .....	p9,383	p9,100	6,843	3,817	3,863	1,562	...	602	...
July .....	8,238	p9,114	2,592	2,234	3,633	416	...	287	...
August .....	7,307	p9,557	3,969	3,665	4,025	914	2,011	422	845
September .....	10,597	p9,650	4,934	4,929	4,294	799	...	521	...
October .....	12,679	10,034	6,269	5,942	4,524	896	...	771	...
November .....	9,698	10,290	4,580	5,175	4,731	1,140	3,661	1,060	2,346
December .....	11,684	10,958	4,543	5,198	4,866	1,442	...	639	...
1977									
January .....	9,777	10,938	3,360	3,478	4,851	955	...	355	...
February .....	11,313	10,825	3,685	4,472	4,780	959	2,380	362	1,926
March .....	10,476	r10,970	4,325	4,843	4,809	680	...	610	...
April .....	12,000	(NA)	4,041	5,513	(NA)	1,274	...	371	...
May .....	r10,569		3,778	5,351		852	(*)	309	(*)
June .....	1(10,883)		3,349	(*)		695		387	
July .....	1(6,746)		3,696			1,280		354	
August .....	1(10,840)		3,750			494		251	
September .....	(NA)		7,371			644		657	
October .....			(NA)			(NA)		(NA)	
November .....									
December .....									

NA=not available; p=preliminary; r=revised; e=estimated. \*Indicates series shown in charts. (See pages 6 and 7.)

1Not seasonally adjusted. See "New Features and Changes for This Issue," page 3.

2See "New Features and Changes for This Issue," page 3.

## Advance Indicators of Defense Activity--Continued

TABLE

2

Year and month	Defense Department military prime contract awards for work performed in the United States, DOD--Continued						
	628. Ships, not seasonally adjusted	629. Weapons and ammunition		630. Electronic and communications equipment		631. Combat vehicles	
		Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)
1975							
January .....	325	125	...	414	...	21	...
February .....	251	160	537	331	1,404	66	288
March .....	11	217	...	535	...	52	...
April .....	621	147	...	313	...	23	...
May .....	94	128	577	587	1,305	86	191
June .....	858	672	...	696	...	161	...
July .....	250	52	...	394	...	126	...
August .....	814	126	545	470	1,410	70	259
September .....	439	95	...	430	...	90	...
October .....	30	128	...	439	...	67	...
November .....	114	66	375	445	1,280	14	172
December .....	211	146	...	332	...	62	...
1976							
January .....	310	76	...	263	...	48	...
February .....	124	101	348	305	1,110	26	238
March .....	1,213	148	...	442	...	61	...
April .....	306	158	...	348	...	32	...
May .....	65	135	447	381	1,204	63	415
June .....	346	450	...	735	...	512	...
July .....	506	52	...	207	...	4	...
August .....	91	90	1,112	506	1,478	150	242
September .....	396	413	...	664	...	119	...
October .....	861	108	...	410	...	252	...
November .....	153	121	453	710	1,778	47	683
December .....	178	173	...	566	...	204	...
1977							
January .....	283	90	...	427	...	74	...
February .....	478	177	427	436	1,470	74	568
March .....	483	131	...	473	...	152	...
April .....	322	193	...	615	...	25	...
May .....	273	225	( <sup>1</sup> )	521	( <sup>1</sup> )	71	( <sup>1</sup> )
June .....	288	132	...	512	...	69	...
July .....	118	133	...	460	...	39	...
August .....	283	218	...	731	...	65	...
September .....	1,078	661	...	1,245	...	170	...
October .....	(NA)	(NA)	...	(NA)	...	(NA)	...
November .....			...		...		...
December .....			...		...		...

NA=not available; p=preliminary; r=revised; e=estimated.

<sup>1</sup>See "New Features and Changes for This Issue," page 3.

# Advance Indicators of Defense Activity--Continued

Year and month	Defense Department military prime contract awards for work performed in the United States, DOD--Continued							
	632. Other hard goods		633. Soft goods		634. Construction		635. Services	
	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)
1975								
January .....	154	...	217	...	168	...	307	...
February .....	143	497	704	1,489	134	481	341	1,396
March .....	152	...	191	...	127	...	201	...
April .....	147	...	164	...	156	...	190	...
May .....	165	487	121	658	291	338	211	925
June .....	399	...	213	...	1,073	...	574	...
July .....	104	...	811	...	82	...	634	...
August .....	115	532	307	937	61	486	570	1,136
September .....	150	...	256	...	178	...	204	...
October .....	201	...	173	...	149	...	216	...
November .....	156	631	214	687	56	605	210	523
December .....	179	...	244	...	176	...	121	...
1976								
January .....	190	...	817	...	85	...	244	...
February .....	180	590	330	1,611	107	448	256	1,111
March .....	166	...	187	...	151	...	230	...
April .....	173	...	221	...	198	...	179	...
May .....	159	434	120	780	213	611	158	881
June .....	316	...	243	...	791	...	587	...
July .....	92	...	287	...	79	...	335	...
August .....	177	792	513	646	196	1,073	504	1,013
September .....	324	...	171	...	403	...	429	...
October .....	105	...	1,760	...	42	...	660	...
November .....	226	600	220	2,603	82	385	391	1,356
December .....	199	...	295	...	136	...	275	...
1977								
January .....	213	...	163	...	125	...	241	...
February .....	141	635	181	944	101	594	371	1,234
March .....	222	...	538	...	175	...	242	...
April .....	237	...	166	...	142	...	211	...
May .....	203	( <sup>1</sup> )	156	( <sup>1</sup> )	456	( <sup>1</sup> )	220	( <sup>1</sup> )
June .....	214	...	200	...	228	...	204	...
July .....	271	...	170	...	160	...	215	...
August .....	229	...	191	...	531	...	243	...
September .....	460	...	253	...	762	...	718	...
October .....	(NA)	...	(NA)	...	(NA)	...	(NA)	...
November .....								
December .....								

NA=not available; p=preliminary; r=revised; e=estimated.

<sup>1</sup>See "New Features and Changes for This Issue," page 3.

## Advance Indicators of Defense Activity--Continued

Year and month	Defense Department military prime contract awards for work performed in the United States, DOD--Continued					640. Defense Department military prime contract awards for work outside the United States, DOD	
	636. Contracts under \$10,000		637. Educational and nonprofit institutions		638. Civilian Health and Medical Program of the Uniformed Services (CHAMPUS), not seasonally adjusted	Not seasonally adjusted	Seasonally adjusted
	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted			
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)		(Mil. dol.)	(Mil. dol.)
1975							
January .....	372	...	51	...	5	114	...
February .....	345	1,144	61	205	0	93	388
March .....	419	...	53	...	2	96	...
April .....	418	...	42	...	0	73	...
May .....	367	1,141	35	201	0	86	813
June .....	635	...	76	...	0	558	...
July .....	263	...	184	...	5	244	...
August .....	345	1,218	92	253	1	149	317
September .....	409	...	80	...	0	124	...
October .....	374	...	67	...	0	252	...
November .....	412	1,273	50	192	0	164	941
December .....	408	...	82	...	0	255	...
1976							
January .....	327	...	39	...	2	286	...
February .....	416	1,156	48	163	2	95	681
March .....	405	...	44	...	2	139	...
April .....	300	...	68	...	1	147	...
May .....	430	1,100	50	254	0	93	609
June .....	625	...	73	...	1	306	...
July .....	253	...	74	...	0	208	...
August .....	351	1,458	55	142	0	132	424
September .....	615	...	74	...	1	347	...
October .....	201	...	203	...	0	575	...
November .....	303	892	127	415	0	107	962
December .....	358	...	78	...	0	175	...
1977							
January .....	365	...	69	...	0	362	...
February .....	344	1,279	61	285	0	74	878
March .....	528	...	91	...	0	191	...
April .....	420	...	65	...	0	101	...
May .....	451	( <sup>1</sup> ) ...	41	( <sup>1</sup> ) ...	0	103	( <sup>1</sup> ) ...
June .....	384	...	36	...	0	157	...
July .....	449	...	47	...	0	190	...
August .....	464	...	50	...	0	174	...
September .....	643	...	80	...	0	613	...
October .....	(NA)	...	(NA)	...	(NA)	(NA)	...
November .....	...	...	...	...	...	...	...
December .....	...	...	...	...	...	...	...

NA=not available; p=preliminary; r=revised; e=estimated.

<sup>1</sup>See "New Features and Changes for This Issue," page 3.

defense indicators

TABLE

2

Advance Indicators of Defense Activity--Continued

Year and month	Defense Department gross unpaid obligations outstanding, DOD						648. Manufacturers' new orders, defense products, Census		650. Manufacturers' new orders from the U.S. Government, aerospace industries, Census, seasonally adjusted*
	643. Total		644. Operations		645. Procurement		Seasonally adjusted*	Moving average of seasonally adjusted data—6-month*	
	Not seasonally adjusted	Seasonally adjusted*	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted			
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)
1975									
January .....	40,819	40,052	7,997	7,625	25,484	24,838	1,398	2,004	...
February .....	40,008	39,875	7,520	7,626	25,452	24,568	2,576	2,147	4,415
March .....	39,473	40,198	7,169	7,775	25,688	25,259	1,996	2,118	...
April .....	38,589	39,918	7,276	7,794	24,932	24,957	2,445	2,080	...
May .....	37,120	40,086	6,746	7,713	24,321	25,099	2,266	2,242	3,912
June .....	39,557	40,959	7,303	8,005	25,311	25,438	1,799	2,167	...
July .....	e41,470	e41,437	e8,733	e8,548	e25,167	e25,370	2,367	2,262	...
August .....	43,248	42,140	8,677	8,132	26,070	26,684	2,130	2,123	4,783
September .....	43,084	41,805	8,677	8,216	26,002	26,479	2,563	2,095	...
October .....	43,754	41,845	9,259	8,247	26,081	26,238	1,610	2,118	...
November .....	42,767	41,468	8,804	8,353	25,810	25,707	2,100	1,963	5,227
December .....	41,551	41,309	8,261	8,241	25,507	25,305	1,937	1,974	...
1976									
January .....	42,110	41,358	8,947	8,548	25,503	24,905	1,440	2,017	...
February .....	41,512	41,459	8,538	8,681	25,586	24,841	2,194	2,197	5,426
March .....	41,046	41,866	7,966	8,658	25,783	25,277	2,818	2,247	...
April .....	41,029	42,494	8,253	8,827	25,606	25,657	2,690	2,360	...
May .....	39,742	42,970	7,795	8,914	25,125	25,929	2,401	2,326	5,272
June .....	42,152	43,612	8,037	8,780	26,508	26,482	2,614	2,280	...
July .....	43,366	43,251	8,939	8,717	26,537	27,162	1,239	2,169	...
August .....	42,525	41,406	8,569	8,025	26,346	26,802	1,919	2,194	3,818
September .....	43,351	42,047	8,615	8,160	26,832	27,185	2,153	2,313	...
October .....	47,890	45,813	10,624	9,484	27,632	27,827	2,840	2,557	...
November .....	48,988	47,517	10,700	10,184	28,934	28,733	3,141	2,675	6,563
December .....	50,354	50,103	10,374	10,353	29,348	29,202	4,050	2,670	...
1977									
January .....	51,694	50,780	11,150	10,660	29,966	29,465	1,949	2,680	...
February .....	52,015	52,016	11,122	11,326	30,485	29,946	1,887	2,806	4,496
March .....	51,326	52,373	10,563	11,494	30,550	30,128	2,214	2,832	...
April .....	52,309	54,206	10,978	11,729	31,330	31,551	3,597	2,520	...
May .....	51,512	55,749	10,574	12,098	31,390	32,562	3,293	2,513	p6,420
June .....	51,549	53,308	10,320	11,254	31,449	31,449	2,182	2,536	...
July .....	50,898	50,695	10,676	10,395	30,853	31,259	1,932	2,439	...
August .....	50,133	48,815	9,792	9,169	30,791	31,292	1,998	r2,550	(NA)
September .....	50,245	48,734	9,474	8,972	32,473	32,603	1,630	p2,623	...
October .....	55,512	53,122	11,412	10,198	33,723	33,455	r4,268	...	...
November .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	p3,730	...	...
December .....									

NA=not available; p=preliminary; r=revised; e=estimated. \*Indicates series shown in charts. (See pages 7 and 8.)



## Advance Indicators of Defense Activity--Continued

Year and month	653. Average weekly overtime hours, production workers, defense products industries, BLS			654. Accession rate, defense products industries, BLS			655. Layoff rate, defense products industries, BLS		
	Not seasonally adjusted	Seasonally adjusted*	Moving average of seasonally adjusted data--4-month*	Not seasonally adjusted	Seasonally adjusted*	Moving average of seasonally adjusted data--4-month*	Not seasonally adjusted	Seasonally adjusted*	Moving average of seasonally adjusted data--4-month*
	(Hours)	(Hours)	(Hours)	(Per 100 employees)	(Per 100 employees)	(Per 100 employees)	(Per 100 employees)	(Per 100 employees)	(Per 100 employees)
1975									
January .....	2.4	2.5	2.6	1.4	1.6	1.6	1.2	1.1	1.0
February .....	2.4	2.5	2.5	1.3	1.6	1.6	1.3	1.2	1.2
March .....	2.3	2.5	2.5	1.3	1.6	1.7	2.1	1.9	1.4
April .....	2.1	2.4	2.4	1.9	2.1	1.6	1.4	1.3	1.4
May .....	2.0	2.3	2.4	1.3	1.3	1.5	1.3	1.3	1.5
June .....	2.5	2.4	2.4	1.7	1.0	1.4	1.3	1.4	1.2
July .....	2.2	2.5	2.4	1.6	1.3	1.2	0.8	1.0	1.2
August .....	2.6	2.6	2.5	1.6	1.2	1.2	1.2	1.3	1.2
September .....	2.8	2.5	2.6	1.7	1.3	1.2	1.0	1.2	1.2
October .....	2.7	2.6	2.6	1.4	1.2	1.2	1.0	1.1	1.1
November .....	2.7	2.5	2.5	1.0	1.3	1.4	0.8	0.7	0.9
December .....	2.9	2.5	2.6	0.8	1.6	1.4	0.6	0.6	0.8
1976									
January .....	2.5	2.6	2.6	1.3	1.4	1.5	1.1	1.0	0.8
February .....	2.5	2.6	2.6	1.3	1.6	1.6	0.8	0.7	0.8
March .....	2.4	2.5	2.4	1.5	1.7	1.5	0.8	0.7	0.7
April .....	1.7	2.0	2.4	1.2	1.4	1.6	0.6	0.5	0.6
May .....	2.3	2.6	2.4	1.6	1.6	1.6	0.6	0.6	0.6
June .....	2.5	2.5	2.4	2.1	1.5	1.4	0.6	0.7	0.6
July .....	2.4	2.7	2.6	1.6	1.3	1.5	0.7	0.8	0.7
August .....	2.7	2.7	2.6	2.0	1.6	1.5	0.6	0.7	0.8
September .....	2.6	2.3	2.6	1.9	1.5	1.5	0.6	0.8	0.8
October .....	2.8	2.7	2.6	1.8	1.6	1.6	0.8	0.8	0.7
November .....	2.8	2.5	2.6	1.6	1.9	1.7	0.5	0.5	0.6
December .....	3.2	2.8	2.7	0.9	1.7	1.9	0.3	0.4	0.6
1977									
January .....	2.7	2.8	2.8	2.2	2.4	2.0	0.6	0.5	0.4
February .....	2.8	2.9	2.8	1.8	2.1	2.1	0.5	0.4	0.5
March .....	2.5	2.7	2.8	2.1	2.3	2.2	0.9	0.7	0.5
April .....	2.6	3.0	2.9	2.0	2.2	2.2	0.4	0.3	0.5
May .....	2.9	3.1	3.0	2.3	2.3	2.2	0.5	0.5	0.4
June .....	3.0	3.0	3.0	2.8	2.2	2.1	0.3	0.3	0.4
July .....	2.8	3.0	2.9	2.0	1.7	2.0	0.6	0.7	0.5
August .....	2.7	2.6	2.3	2.4	2.0	1.9	0.4	0.5	0.5
September .....	r3.4	r3.2	p3.0	2.2	1.8	(NA)	0.5	0.6	(NA)
October .....	p3.3	p3.1	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
November .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
December .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

NA=not available; p=preliminary; r=revised; e=estimated. \*Indicates series shown in charts. (See page 8.)

# defense indicators

TABLE

3

## Intermediate and Final Indicators of Defense Activity

Year and month	657. Output of defense and space equipment, FRB, seasonally adjusted*	659. Manufacturers' inventories, defense products, Census, seasonally adjusted*	661. Manufacturers' unfilled orders, defense products, Census, seasonally adjusted*	664. Manufacturers' unfilled orders from the U.S. Government, aerospace industries, Census, seasonally adjusted*	666. Defense Department progress payments outstanding, DOD, not seasonally adjusted*	670. Employment in defense products industries, total, BLS	
	(Index: 1967=100)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	Not seasonally adjusted	Seasonally adjusted*
						(Thous.)	(Thous.)
1975							
January .....	82.1	5,487	27,221	...	...	1,178	1,175
February .....	79.9	5,565	27,815	...	...	1,141	1,141
March .....	79.7	5,639	27,823	20,907	9,609	1,137	1,142
April .....	80.2	5,750	28,238	...	...	1,121	1,128
May .....	80.9	5,890	28,604	...	...	1,131	1,140
June .....	81.6	6,051	28,459	21,230	10,464	1,123	1,127
July .....	81.0	6,207	28,920	...	...	1,110	1,117
August .....	80.6	6,252	29,007	...	...	1,100	1,108
September .....	81.2	6,399	29,706	20,906	11,008	1,104	1,100
October .....	78.5	6,456	29,237	...	...	1,097	1,090
November .....	77.3	6,549	29,264	...	...	1,089	1,077
December .....	77.7	6,568	29,210	21,776	11,257	1,088	1,075
1976							
January .....	80.5	6,488	28,449	...	...	1,084	1,081
February .....	80.1	6,523	28,438	...	...	1,075	1,076
March .....	79.5	6,634	29,069	22,598	9,848	1,071	1,077
April .....	78.4	6,720	29,550	...	...	1,066	1,072
May .....	78.1	6,824	29,727	...	...	1,061	1,070
June .....	77.5	6,774	30,294	22,883	12,041	1,060	1,064
July .....	77.5	6,846	29,422	...	...	1,043	1,050
August .....	78.5	6,804	29,153	...	...	1,053	1,060
September .....	77.6	6,798	29,188	22,020	11,881	1,062	1,059
October .....	78.0	6,847	29,800	...	...	1,062	1,056
November .....	77.6	6,847	30,698	...	...	1,066	1,054
December .....	77.2	6,577	32,231	21,666	8,465	1,070	1,060
1977							
January .....	78.0	6,609	31,536	...	...	1,067	1,062
February .....	78.5	6,625	30,809	...	...	1,067	1,069
March .....	78.5	6,517	30,411	22,962	8,521	1,061	1,067
April .....	79.9	6,602	31,512	...	...	1,071	1,077
May .....	80.0	6,637	32,226	...	...	1,071	1,079
June .....	80.3	6,874	31,857	p24,308	8,735	1,083	1,086
July .....	80.4	6,936	31,212	...	...	1,084	1,092
August .....	80.8	6,926	30,707	...	...	1,077	1,084
September .....	r80.9	6,854	29,768	(NA)	7,838	1,089	1,084
October .....	r79.3	6,596	r31,494			pl,051	pl,045
November .....	p79.0	(NA)	p32,627			(NA)	(NA)
December .....							

NA=not available; p=preliminary; r=revised; e=estimated. \*Indicates series shown in charts. (See pages 9 and 10.)

TABLE

3

## Intermediate and Final Indicators of Defense Activity--Continued

Year and month	671. Employment in defense products industries, production workers, BLS		673. Index of aggregate weekly hours, defense products industries, BLS		675. Index of aggregate weekly payrolls, production workers, defense products industries, BLS	
	Not seasonally adjusted	Seasonally adjusted*	Not seasonally adjusted	Seasonally adjusted*	Not seasonally adjusted	Seasonally adjusted*
	(Thous.)	(Thous.)	(1967=100)	(1967=100)	(1967=100)	(1967=100)
1975						
January .....	618	615	69.2	69.2	102.8	102.6
February .....	589	589	67.0	67.0	98.6	98.4
March .....	585	588	66.8	67.0	99.1	99.4
April .....	570	574	66.1	66.8	97.6	99.5
May .....	581	588	66.5	66.8	100.2	101.3
June .....	573	577	66.4	66.6	101.2	102.3
July .....	564	570	65.0	66.1	97.9	101.7
August .....	555	563	64.9	65.6	98.3	101.0
September .....	558	556	65.5	65.1	102.0	101.2
October .....	554	549	64.9	64.5	101.5	100.4
November .....	549	540	64.6	63.5	101.8	98.7
December .....	549	538	65.0	63.8	104.9	99.8
1976						
January .....	545	542	64.1	64.1	101.3	101.1
February .....	540	540	63.5	63.5	100.7	100.4
March .....	537	539	63.3	63.6	100.8	101.1
April .....	533	537	62.0	62.7	96.1	99.3
May .....	530	536	62.6	63.0	99.2	100.0
June .....	529	533	62.6	62.8	99.4	100.2
July .....	510	516	61.2	62.2	96.0	99.8
August .....	520	528	62.0	62.7	99.2	101.8
September .....	529	528	62.4	62.0	101.9	101.1
October .....	529	525	62.4	62.0	104.0	102.6
November .....	532	523	63.5	62.5	106.5	103.4
December .....	533	524	64.1	62.7	109.2	103.8
1977						
January .....	533	529	63.0	62.8	106.4	105.5
February .....	531	531	63.6	63.7	108.5	108.4
March .....	525	528	63.3	63.6	107.4	107.8
April .....	533	538	63.5	64.5	109.2	113.1
May .....	534	539	63.8	64.1	110.3	111.2
June .....	541	543	64.6	64.6	112.7	113.5
July .....	539	546	64.0	65.1	110.9	115.3
August .....	537	545	64.0	64.7	111.5	114.5
September .....	r547	r545	r65.0	r64.6	r117.3	r116.4
October .....	p523	p518	p62.6	p62.3	p111.2	p109.7
November .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
December .....						

NA=not available; p=preliminary; r=revised; e=estimated. \*Indicates series shown in charts. (See page 10.)

# defense indicators

TABLE

3

## Intermediate and Final Indicators of Defense Activity--Continued

Year and month	Defense Department personnel, DOD		Defense Department net outlays, DOD				
	677. Military, active duty, not seasonally adjusted*	678. Civilian, direct hire employment, not seasonally adjusted*	680. Total, military functions and military assistance			681. Operations	
			Not seasonally adjusted	Seasonally adjusted*	Moving average of seasonally adjusted data--6-month*	Not seasonally adjusted	Seasonally adjusted
	(Thous.)	(Thous.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)
1975							
January .....	2,145	1,038	7,051	6,766	7,312	4,775	4,648
February .....	2,146	1,036	7,258	7,590	7,284	4,727	4,924
March .....	2,137	1,034	7,244	7,190	7,258	4,736	4,831
April .....	2,127	1,034	7,190	6,958	7,056	4,960	4,856
May .....	2,124	1,035	7,780	7,494	7,308	4,909	4,941
June .....	2,128	1,042	7,476	6,336	7,475	4,954	4,747
July .....	2,129	1,052	7,124	8,278	7,423	4,918	4,977
August .....	2,111	1,038	7,961	8,594	7,552	5,081	5,029
September .....	2,105	1,030	6,631	6,880	7,566	4,810	5,016
October .....	2,097	1,031	7,913	7,732	7,788	5,260	5,131
November .....	2,099	1,029	7,203	7,574	7,515	4,997	4,988
December .....	2,084	1,028	7,695	7,672	7,251	5,078	5,067
1976							
January .....	2,092	1,023	6,649	6,636	7,326	4,887	4,940
February .....	2,093	1,019	6,962	7,011	7,322	4,848	4,879
March .....	2,090	1,016	7,642	7,334	7,259	5,026	4,995
April .....	2,087	1,011	7,872	7,703	7,068	5,297	5,160
May .....	2,081	1,010	7,042	7,200	7,406	4,889	5,023
June .....	2,082	1,010	7,843	6,525	7,486	5,170	4,925
July .....	2,087	1,014	7,433	8,663	7,563	5,050	5,135
August .....	2,085	1,006	7,163	7,493	7,546	5,059	5,054
September .....	2,084	997	7,513	7,794	7,562	5,457	5,543
October .....	2,086	995	7,478	7,600	7,657	4,984	5,015
November .....	2,082	996	7,301	7,294	7,477	5,277	5,220
December .....	2,072	995	7,422	7,096	7,614	5,356	5,190
1977							
January .....	2,077	994	6,979	7,586	7,649	5,262	5,436
February .....	2,078	995	8,004	8,312	7,697	5,202	5,430
March .....	2,075	995	8,454	8,006	7,911	5,529	5,501
April .....	2,071	995	7,850	7,889	7,896	5,487	5,443
May .....	2,070	997	8,412	8,575	8,125	5,269	5,349
June .....	2,075	1,009	8,266	7,005	8,135	5,540	5,271
July .....	2,079	1,008	r7,880	r8,965	8,290	5,389	5,449
August .....	2,073	998	8,244	8,370	r8,324	5,505	5,402
September .....	2,075	982	8,795	8,938	p8,324	5,820	5,879
October .....	2,072	983	7,922	8,092		r5,583	r5,756
November .....	p2,069	(NA)	p8,829	p8,572		p5,581	p5,403
December .....							

NA=not available; p=preliminary; r=revised; e=estimated. \*Indicates series shown in charts. (See pages 10 and 11.)



TABLE  
3

## Intermediate and Final Indicators of Defense Activity--Continued

Year and month	Defense Department net outlays, DOD--Continued			683. Budget outlays for the national defense function, Treasury		685. Defense Department personnel compensation, DOD	
	682. Procurement			Seasonally adjusted*	Moving average of seasonally adjusted data--6-month*	Not seasonally adjusted	Seasonally adjusted*
	Not seasonally adjusted	Seasonally adjusted*	Moving average of seasonally adjusted data--6-month*				
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)
1975							
January .....	1,427	1,428	1,460	7,039	7,554	2,913	2,768
February .....	1,351	1,444	1,429	7,896	7,526	2,808	2,869
March .....	1,500	1,440	1,414	7,385	7,536	2,812	2,850
April .....	1,220	1,194	1,354	7,297	7,342	2,867	2,870
May .....	1,467	1,406	1,328	7,788	7,564	2,870	2,877
June .....	1,409	1,215	1,360	6,649	7,747	2,823	2,887
July .....	1,225	1,268	1,322	8,367	7,706	2,941	2,895
August .....	1,559	1,634	1,361	8,996	7,818	2,873	2,910
September .....	1,191	1,217	1,330	7,140	7,836	2,936	2,961
October .....	1,500	1,425	1,365	7,971	8,079	3,008	2,954
November .....	1,081	1,220	1,384	7,896	7,830	2,866	2,893
December .....	1,319	1,427	1,328	8,103	7,352	2,916	2,904
1976							
January .....	1,363	1,384	1,305	6,874	7,411	3,018	2,907
February .....	1,227	1,293	1,382	6,126	7,380	2,820	2,804
March .....	1,195	1,082	1,361	7,497	7,286	2,887	2,866
April .....	1,792	1,884	1,330	7,784	7,068	2,845	2,861
May .....	1,092	1,095	1,321	7,334	7,376	2,851	2,889
June .....	1,418	1,244	1,281	6,795	7,589	3,007	3,036
July .....	1,347	1,326	1,338	8,717	7,656	2,963	2,960
August .....	1,063	1,055	1,241	7,409	7,649	2,962	2,962
September .....	1,356	1,423	1,328	7,896	7,653	2,978	2,997
October .....	1,337	1,303	1,418	7,743	7,776	3,026	3,037
November .....	1,502	1,617	1,462	7,360	7,610	3,020	2,978
December .....	1,745	1,781	1,561	7,530	7,764	3,097	3,088
1977							
January .....	1,524	1,594	1,554	7,723	7,802	3,034	2,951
February .....	1,570	1,646	1,596	8,331	7,845	2,886	2,951
March .....	1,511	1,381	1,552	8,125	8,060	3,137	3,118
April .....	1,558	1,555	1,496	8,000	7,996	3,008	3,063
May .....	1,324	1,358	1,526	8,650	8,289	3,084	3,087
June .....	1,643	1,442	1,509	7,146	8,296	3,112	3,143
July .....	1,572	1,772	1,511	9,483	8,455	3,054	3,082
August .....	1,521	1,547	1,502	8,370	8,504	3,146	3,109
September .....	1,372	1,391	p1,611	9,079	8,513	r3,108	r3,136
October .....	1,512	1,500		8,294		p3,212	p3,222
November .....	p1,877	p2,014		8,704		(NA)	(NA)
December .....							

NA=not available; p=preliminary; r=revised; e=estimated. \*Indicates series shown in charts. (See page 11.)

TABLE

3

# Intermediate and Final Indicators of Defense Activity--Continued

Year and month	688. Manufacturers' shipments, defense products, Census		689. Manufacturers' shipments to the U.S. Government, aerospace industries, Census, seasonally adjusted*	691. Ratio, manufacturers' unfilled orders to shipments, defense products, Census		693. Ratio, manufacturers' inventories to shipments, defense products, Census	
	Seasonally adjusted*	Moving average of seasonally adjusted data--5-month*		Seasonally adjusted*	Moving average of seasonally adjusted data--5-month*	Seasonally adjusted*	Moving average of seasonally adjusted data--5-month*
	(Mil. dol.)	(Mil. dol.)		(Ratio)	(Ratio)	(Ratio)	(Ratio)
1975							
January .....	1,923	1,902	...	14.2	14.6	2.9	2.9
February .....	1,982	1,950	4,105	14.0	14.3	2.8	2.9
March .....	1,989	1,965	...	14.0	14.2	2.8	2.9
April .....	2,030	1,969	...	13.9	14.3	2.8	2.9
May .....	1,901	1,954	4,104	15.0	14.5	3.1	3.0
June .....	1,943	1,965	...	14.6	14.6	3.1	3.1
July .....	1,906	1,931	...	15.2	15.0	3.3	3.2
August .....	2,043	1,967	4,847	14.2	14.8	3.1	3.2
September .....	1,864	1,993	...	15.9	14.7	3.4	3.2
October .....	2,079	2,010	...	14.1	14.6	3.1	3.2
November .....	2,073	2,042	4,283	14.1	14.3	3.2	3.2
December .....	1,991	2,110	...	14.7	13.7	3.3	3.1
1976							
January .....	2,201	2,132	...	12.9	13.6	2.9	3.1
February .....	2,206	2,159	4,564	12.9	13.4	3.0	3.0
March .....	2,187	2,206	...	13.3	13.2	3.0	3.0
April .....	2,210	2,175	...	13.4	13.6	3.0	3.1
May .....	2,224	2,156	5,056	13.4	13.8	3.1	3.1
June .....	2,047	2,156	...	14.8	13.8	3.3	3.1
July .....	2,111	2,137	...	13.9	13.8	3.2	3.2
August .....	2,188	2,138	4,528	13.3	13.8	3.1	3.2
September .....	2,117	2,178	...	13.8	13.6	3.2	3.1
October .....	2,228	2,258	...	13.4	13.4	3.1	3.0
November .....	2,244	2,350	4,970	13.7	13.1	3.1	2.9
December .....	2,515	2,450	...	12.8	12.7	2.6	2.8
1977							
January .....	2,647	2,526	...	11.9	12.4	2.5	2.6
February .....	2,615	2,577	5,277	11.8	12.1	2.5	2.5
March .....	2,611	2,589	...	11.6	12.1	2.5	2.5
April .....	2,496	2,526	...	12.6	12.2	2.6	2.6
May .....	2,578	2,563	p5,054	12.5	12.3	2.6	2.6
June .....	2,551	2,541	...	12.5	12.4	2.7	2.7
July .....	2,578	2,555	...	12.1	12.2	2.7	2.7
August .....	2,501	r2,548	(NA)	12.3	r12.2	2.8	2.7
September .....	2,568	p2,558	...	11.6	p12.2	2.7	(NA)
October .....	r2,543	...	...	r12.4	...	2.6	...
November .....	p2,598	...	...	p12.6	...	(NA)	...
December .....	...	...	...	...	...	...	...

NA=not available; p=preliminary; r=revised; e=estimated. \*Indicates series shown in charts. (See page 12.)

TABLE

4

## Defense-Related Balance of Payments Components

Year and quarter	546. Transfers under U.S. military agency sales contracts (exports), BEA <sup>1</sup>		547. Direct defense expenditures (imports), BEA, not seasonally adjusted*	696. U.S. Government cash receipts associated with military sales contracts, BEA <sup>2</sup>	
	Not seasonally adjusted	Seasonally adjusted*		Not seasonally* adjusted	Seasonally adjusted*
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)
1973					
First quarter. ....	332	347	1,169	520	566
Second quarter. ....	504	455	1,231	544	552
Third quarter. ....	489	531	1,067	610	617
Fourth quarter. ....	1,017	1,009	1,162	616	555
1974					
First quarter. ....	644	638	1,153	497	546
Second quarter. ....	738	683	1,298	642	650
Third quarter. ....	720	781	1,265	995	990
Fourth quarter. ....	850	850	1,319	808	756
1975					
First quarter. ....	946	924	1,317	1,050	(NA)
Second quarter. ....	888	874	1,185	1,013	
Third quarter. ....	902	957	1,096	1,148	
Fourth quarter. ....	1,183	1,164	1,198	1,376	
1976					
First quarter. ....	1,132	1,095	1,160	2,246	
Second quarter. ....	1,193	1,189	1,228	1,858	
Third quarter. ....	1,403	1,472	1,237	2,041	
Fourth quarter. ....	1,486	1,457	1,222	2,068	
1977					
First quarter. ....	1,912	1,845	1,329	1,992	
Second quarter. ....	r1,702	r1,714	1,403	r1,883	
Third quarter. ....	p1,918	p2,008	p1,431	p1,955	
Fourth quarter. ....					

NA=not available; p=preliminary; r=revised; e=estimated. \*Indicates series shown in charts. (See page 13.)

<sup>1</sup>Includes deliveries for which Israel has been released from its contractual liability to pay.<sup>2</sup>Excludes funds made available to release Israel from its contractual liability to pay for defense articles and services purchased through military sales contracts. Quarterly expenditures for such purpose under Public Law 93-199 and subsequent legislation amounted to (in millions); 1974, I1Q, \$623; I11Q, \$223; IVQ, \$91; 1975, IQ, \$187; I1Q, \$124; I11Q, \$83; IVQ, \$242; 1976, IQ, \$16; I1Q, \$100; I11Q, \$743; IVQ, \$5; 1977, IQ, \$138; I1Q, \$245; I11Q, \$117.

# Appendix A. SEASONAL ADJUSTMENT FACTORS

Series title	1977											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>MONTHLY SERIES</b>												
Defense Department gross obligations incurred:												
617. Total <sup>1</sup>	99.9	88.2	94.7	94.6	78.0	135.2	112.5	108.5	99.8	105.3	92.4	90.0
619. Operations <sup>1</sup>	103.9	88.4	93.4	101.5	89.3	117.8	116.5	101.2	96.9	108.2	90.3	90.8
621. Procurement <sup>1</sup>	116.1	99.4	105.0	81.2	63.1	161.4	84.7	82.6	100.7	106.8	111.2	87.3
623. Gross obligations incurred outside the Federal Government for national defense <sup>1</sup>	101.3	84.9	99.6	94.1	82.8	126.3	117.7	110.0	96.5	95.2	103.3	90.4
625. Defense Department military prime contract awards for work performed in the United States	96.6	82.4	89.3	73.3	70.6	177.9	115.5	107.1	101.4	111.0	86.7	87.4
Defense Department gross unpaid obligations outstanding: <sup>2</sup>												
643. Total	101.8	100.0	98.0	96.5	92.4	96.7	100.4	102.7	103.1	104.5	103.1	100.5
644. Operations	104.6	98.2	91.9	93.6	87.4	91.7	102.7	106.8	105.6	111.9	104.9	100.2
645. Procurement	101.7	101.8	101.4	99.3	96.4	100.0	98.7	98.4	99.6	100.8	101.3	100.5
648. Manufacturers' new orders, defense products <sup>3</sup>	108.0	93.7	97.3	82.5	65.3	117.1	186.8	94.1	102.5	106.9	83.8	101.0
653. Average weekly overtime hours, production workers, defense products industries <sup>4</sup>	-.1	-.1	-.2	-.4	-.2	.0	-.2	.1	.2	.2	.3	.4
654. Accession rate, defense products industries <sup>4</sup>	-.2	-.3	-.2	-.2	.0	.6	.3	.4	.4	.2	-.4	-.8
655. Layoff rate, defense products industries <sup>4</sup>	.1	.1	.2	.1	.0	.0	-.1	-.1	-.1	.0	.0	-.1
657. Output of defense and space equipment <sup>5</sup>	100.3	100.3	100.4	99.1	99.6	100.3	98.5	98.2	99.6	100.0	101.0	102.3
659. Manufacturers' inventories, defense products <sup>3</sup>	98.5	100.1	101.1	100.7	99.8	100.4	100.1	100.3	100.3	100.3	100.9	100.4
661. Manufacturers' unfilled orders, defense products <sup>3</sup>	101.2	100.9	100.6	99.1	96.2	97.4	101.4	101.2	100.9	101.5	100.0	99.9
Employment in defense products industries:												
670. Total	100.5	99.8	99.5	99.4	99.3	99.7	99.2	99.3	100.4	100.6	101.0	100.9
671. Production workers	100.8	99.9	99.5	99.2	99.0	99.6	98.7	98.5	100.4	100.9	101.6	101.7
673. Index of aggregate weekly hours, defense products industries	100.3	99.9	99.6	98.5	99.6	99.9	98.3	99.0	100.6	100.6	101.5	102.1
675. Index of aggregate weekly payrolls, production workers, defense products industries	100.9	100.1	99.7	96.6	99.2	99.3	96.2	97.4	100.7	101.4	103.0	105.2
Defense Department net outlays:												
680. Total, military functions and military assistance <sup>1</sup>	92.0	96.3	105.6	99.5	98.1	118.0	87.9	98.5	98.4	97.9	103.0	102.8
681. Operations <sup>1</sup>	96.8	95.8	100.5	100.8	98.5	105.1	98.9	101.9	99.0	97.0	103.3	99.5
682. Procurement <sup>1</sup>	95.6	95.4	109.4	100.2	97.5	113.9	88.7	98.3	98.6	100.8	93.2	107.5
683. Budget outlays for the national defense function <sup>1</sup>	91.7	97.6	105.5	99.7	98.9	117.6	84.4	100.5	98.9	97.5	103.1	103.1
685. Defense Department personnel compensation <sup>1</sup>	102.8	97.8	100.6	98.2	99.9	99.0	99.1	101.2	99.1	99.7	101.6	100.3
688. Manufacturers' shipments, defense products <sup>3</sup>	87.6	97.6	100.4	98.5	100.5	105.4	94.8	97.4	106.1	101.4	96.3	103.8
<b>QUARTERLY SERIES</b>												
	IQ			IIQ			IIIQ			IVQ		
200. Gross national product <sup>3</sup>	95.9			99.9			98.9			105.1		
264. Fed. Govt. purchases of goods and services, national defense <sup>3</sup>	98.3			102.8			97.7			101.4		
546. Transfers under U.S. military agency sales contracts-exports <sup>5</sup>	37			4			-69			29		
Defense Department military prime contract awards:												
626. Aircraft	109.0			90.1			106.3			95.0		
627. Missile and space systems	68.9			80.7			146.2			105.3		
629. Weapons and ammunition	93.2			167.3			50.5			88.8		
630. Electronic and communications equipment	90.9			121.2			93.8			94.8		
631. Combat vehicles	52.8			164.5			108.3			73.6		
632. Other hard goods	90.7			146.1			75.1			88.3		
633. Soft goods	93.4			72.2			146.6			87.4		
634. Construction	67.5			197.2			67.9			67.5		
635. Services	69.2			103.6			130.0			97.8		
636. Under \$10,000	96.7			122.8			84.0			96.6		
637. Educational and nonprofit institutions	77.6			76.0			149.3			98.2		
640. Outside U.S.	71.4			92.3			147.6			89.1		
Aerospace industries:												
650. Manufacturers' new orders from the U.S. Government	90.5			82.7			122.8			104.4		
664. Manufacturers' unfilled orders from the U.S. Government	101.3			96.2			100.3			102.1		
669. Manufacturers' shipments to the U.S. Government	93.8			102.6			101.0			102.6		

NOTE: The seasonal adjustment factors presented in this table were computed using the techniques described in the Bureau of the Census Technical Paper No. 15, *The X-11 Variant of the Census Method II Seasonal Adjustment Program*.

Monthly data for Defense Department military prime contract awards by commodity category (series 626 to 640) have not been adjusted for seasonal variation. The series on direct defense expenditures-imports (series 547), Defense Department progress payments outstanding (series 666), and Defense Department personnel (series 677 and 678) contain no measurable seasonal variation.

<sup>1</sup> Factors are products of seasonal and trading-day factors.

<sup>2</sup> Prior to 1972, data for gross unpaid obligations outstanding are not available for a number

of months but these gaps were filled with averages of preceding and following months for purposes of estimating seasonal variation.

<sup>3</sup> These series have been adjusted by the source agencies. The factors shown here are implicit seasonal factors for the calendar year 1976 and are derived by dividing the seasonally unadjusted data by the seasonally adjusted data.

<sup>4</sup> These series have been seasonally adjusted using the additive version of the seasonal adjustment program. Seasonally adjusted data are derived by subtracting the adjustment factor from the unadjusted data. Seasonally adjusted data for other series are derived by dividing the seasonal factors into the unadjusted data.

<sup>5</sup> This series is the total of component series which have been adjusted separately by the source agency. The factors shown here are implicit seasonal factors for the calendar year 1976 and are derived by subtracting the seasonally adjusted data from the seasonally unadjusted data.



# Appendix B. AVERAGE CHANGES AND RELATED MEASURES OF VARIABILITY

## Part 1. Monthly Series

Series title	Period covered	D	CI	T	C	T/C	MCD	Average duration of run (ADR)	
								CI	MCD
Defense Department gross obligations incurred:									
617. Total. . . . .	Jan. '57-Jan. '76 . . .	18.28	6.98	6.89	0.72	9.53	6	1.53	2.30
619. Operations . . . . .	July '59-Jan. '76 . . .	8.98	2.77	2.66	.65	4.09	4	1.69	3.00
621. Procurement . . . . .	Jan. '57-Jan. '76 . . .	44.28	22.39	22.27	1.54	14.44	6	1.46	2.08
623. Gross obligations incurred outside the Federal Government for national defense . . . . .	July '63-Sept. '75 . .	14.17	7.92	7.82	.73	10.72	6	1.52	2.61
625. Defense Department military prime contract awards for work performed in the United States, total . . . . .	Jan. '57-Jan. '76 . . .	32.78	15.55	15.41	1.35	11.42	6	1.42	2.05
Defense Department gross unpaid obligations outstanding:									
643. Total. . . . .	Jan. '57-Jan. '76 . . .	2.13	1.32	.95	.88	1.08	2	2.65	3.98
644. Operations . . . . .	Jan. '67-Jan. '76 . . .	5.59	2.68	2.37	1.13	2.10	3	1.96	5.05
645. Procurement . . . . .	Jan. '67-Jan. '76 . . .	2.19	1.52	1.07	.94	1.14	2	2.08	4.12
Manufacturers' new orders:									
647. Defense products industries . . . . .	Jan. '57-Mar. '72 . . .	(NA)	15.11	14.89	.97	15.32	6	1.58	2.33
648. Defense products . . . . .	Feb. '68-Jan. '76 . . .	(NA)	21.50	21.43	1.47	14.59	6	1.56	1.80
*653. Average weekly overtime hours, production workers, defense products industries (hours). . . . .	Jan. '58-Jan. '76 . . .	.22	.11	.11	.03	3.14	4	2.50	3.70
*654. Accession rate, defense products industries (per 100 employees) . . . . .	Jan. '58-Jan. '76 . . .	.38	.16	.15	.05	3.12	4	2.16	4.18
*655. Layoff rate, defense products industries (per 100 employees) . . . . .	Jan. '58-Jan. '76 . . .	.17	.14	.13	.04	3.14	4	1.93	4.18
657. Output of defense and space equipment. . . . .	Jan. '57-Jan. '76 . . .	(NA)	.96	.50	.75	.67	1	3.40	3.40
Manufacturers' inventories:									
658. Defense products industries . . . . .	Jan. '57-Mar. '72 . . .	(NA)	1.04	.52	.85	.62	1	2.80	2.80
659. Defense products . . . . .	Jan. '68-Jan. '76 . . .	(NA)	1.75	1.13	1.29	.88	1	3.10	3.10
Manufacturers' unfilled orders:									
660. Defense products industries . . . . .	Jan. '57-Mar. '72 . . .	(NA)	1.23	.90	.83	1.09	2	2.76	3.42
661. Defense products . . . . .	Jan. '68-Jan. '76 . . .	(NA)	1.51	1.18	.93	1.27	2	2.04	4.13
Employment in defense products industries:									
670. Total. . . . .	Jan. '58-Jan. '76 . . .	.76	.70	.29	.59	.50	1	4.91	4.91
671. Production workers . . . . .	Jan. '58-Jan. '76 . . .	1.08	.93	.51	.70	.73	1	3.72	3.72
673. Index of aggregate weekly hours, defense products industries. . . . .	Jan. '58-Jan. '76 . . .	.95	.76	.39	.60	.65	1	4.00	4.00
675. Index of aggregate weekly payrolls, production workers, defense products industries. . . . .	Jan. '58-Jan. '76 . . .	1.72	1.14	.75	.78	.96	1	2.92	2.92
Defense Department personnel:									
677. Military, active duty (U) . . . . .	Jan. '57-Jan. '76 . . .	.62	(NA)	.27	.55	.48	1	3.86	3.86
678. Civilian, direct hire employment (U) . . . . .	Jan. '57-Jan. '76 . . .	.55	(NA)	.34	.42	.81	1	4.30	4.30
Defense Department net outlays:									
680. Total, military functions and military assistance . . . . .	Jan. '57-Jan. '76 . . .	8.89	4.31	4.19	.77	5.42	6	1.70	3.10
681. Operations . . . . .	July '59-Jan. '76 . . .	7.07	3.62	3.41	.73	4.69	5	1.58	2.34
682. Procurement . . . . .	Jan. '57-Jan. '76 . . .	15.10	11.77	11.65	1.59	7.32	6	1.57	2.90
683. Budget outlays for the national defense function. . . . .	Jan. '57-Jan. '76 . . .	8.87	4.27	4.18	.73	5.73	6	1.58	2.97
685. Defense Department personnel compensation . . . . .	Jan. '67-Jan. '76 . . .	2.70	1.33	1.13	.49	2.32	4	2.57	4.38
Manufacturers' shipments:									
687. Defense products industries . . . . .	Jan. '57-Mar. '72 . . .	(NA)	2.67	2.49	.87	2.85	3	1.64	3.40
688. Defense products . . . . .	Jan. '68-Jan. '76 . . .	(NA)	4.40	4.34	.98	4.41	5	1.57	2.71
Ratio, manufacturers' unfilled orders to shipments:									
690. Defense products industries . . . . .	Jan. '57-Mar. '72 . . .	(NA)	2.95	2.71	.96	2.82	4	1.90	3.81
691. Defense products . . . . .	Jan. '68-Jan. '76 . . .	(NA)	4.93	4.81	1.01	4.77	5	1.69	2.85
Ratio, manufacturers' inventories to shipments:									
692. Defense products industries . . . . .	Jan. '57-Mar. '72 . . .	(NA)	2.84	2.90	.72	4.01	5	2.46	5.74
693. Defense products . . . . .	Jan. '68-Jan. '76 . . .	(NA)	5.29	5.18	1.13	4.57	5	1.96	3.07

NA = not available.

\*Measures for these series are based on actual changes rather than percent changes (see definition below). <sup>(U)</sup> indicates measures are based on unadjusted data.

### BRIEF DEFINITIONS OF MEASURES SHOWN IN PART 1

The measures in this appendix provide a historical perspective for interpreting current changes in each series. They are derived using the Census X-11 seasonal adjustment program. Brief definitions of the measures are given below; more complete definitions appear in *Electronic Computers and Business Indicators* by Julius Shiskin, issued as Occasional Paper 57 by the National Bureau of Economic Research, 1957 (reprinted from *Journal of Business*, October 1957).

" $\bar{D}$ " is the average month-to-month percent change, without regard to sign, in the original unadjusted series. (See final paragraph below for exceptions to these definitions.)

" $\bar{CI}$ " is the same for the seasonally adjusted series.

" $\bar{C}$ " is the same for the short-term trend, which is a smooth, flexible moving average of the seasonally adjusted series.

" $\bar{T}$ " is the same for the irregular component, which is obtained by dividing the seasonally adjusted series by the short-term trend.

" $\bar{T/C}$ " measures the relative smoothness (small values) or irregularity (large values) of the seasonally adjusted series. It is the ratio of the average monthly percent change (without regard to sign) in the irregular component to the average monthly percent change (without regard to sign) in the short-term trend.

"MCD" (months for cyclical dominance) estimates the number of months required for the short-term trend to dominate the irregular component. Average percent changes are computed for spans of from 1 to 12 months for both the irregular component and the short-term trend. MCD is the shortest span of months for which the average percent change (without regard to sign) in the short-term trend is greater than that in the irregular component. All MCD's greater than "5" are shown as "6".

# Appendix B. AVERAGE CHANGES AND RELATED MEASURES OF VARIABILITY Continued

"Average Duration of Run" (ADR) is another measure of smoothness and is equal to the average number of consecutive monthly changes in the same direction in any series of observations. When there is no change between two observations, a change in the same direction as the preceding change is assumed. The ADR is shown for the seasonally adjusted series (CI) and the MCD curve, which is a moving average (with the number of terms equal to MCD) of the seasonally adjusted series. A comparison of these measures with the expected ADR of a random series indicates whether the changes approximate those of a random series. In a random series, the expected ADR is 1.8 and the actual values fall between 1.36 and 1.75 about 95 percent of the time. For a moving average of a random series, the expected ADR is 2.

Measures for series identified with an asterisk (\*) are computed by an additive method. This method is used for series with zero or negative data, series which could approach zero, and series expressed in percent. In this method, the measures are defined the same as above except for two differences: (1) the measures are based on actual month-to-month changes rather than percent changes and (2) the irregular component is obtained by subtracting the short-term trend from the seasonally adjusted series. The average changes shown above for the components of such a series are in the same unit of measure as the series itself. The unit is indicated in the series title.

## Part 2. Quarterly Series

Series title	Period covered	Q	C	I	C	I/C	Average duration of run (ADR)	QCD
200. Gross national product	10 '51-IVQ '75	(NA)	1.84	0.35	1.76	0.20	8.93	8.33
264. Federal Government purchases of goods and services, national defense	10 '51-IVQ '75	(NA)	1.95	1.70	1.86	1.00	2.26	2.26
548. Transfers under U.S. military agency sales contracts—exports (mil. dol.)	10 '60-IVQ '75	79.21	65.13	48.28	34.19	1.41	7.0	2.30
547. Direct defense expenditures—imports (mil. dol.)	10 '60-IVQ '75	42.32	(NA)	36.13	24.65	1.47	11.66	2.82
613. National defense purchases as a percent of GNP (percent)	10 '51-IVQ '75	(NA)	.16	.07	.15	.46	5.36	5.36
650. Manufacturers' new orders from the U.S. Government, aerospace industries	10 '61-IVQ '75	24.44	17.96	14.82	5.85	2.53	1.44	1.73
664. Manufacturers' unfilled orders from the U.S. Government, aerospace industries	10 '61-IVQ '75	4.55	3.91	2.44	2.68	.91	2.27	2.27
666. Defense Department progress payments outstanding	10 '57-IVQ '75	4.80	(NA)	2.06	4.35	.47	2.78	2.78
689. Manufacturers' shipments to the U.S. Government, aerospace industries	10 '61-IVQ '75	7.04	4.27	3.43	2.11	.62	8.4	2.96
696. U.S. Government cash receipts associated with military sales contracts (million dollars)	10 '60-IVQ '75	107.60	83.62	61.48	45.74	1.34	2.2	2.82

NA = not available.  
\*Measures for these series are based on actual changes rather than percent changes (see definition below).  
Measures are based on unadjusted data.

Measures for series identified with an asterisk (\*) are computed by an additive method. This method is the same as that used for the monthly series except for the use of quarterly data rather than monthly.

## BRIEF DEFINITIONS OF MEASURES SHOWN IN PART 1

"MCD" (months for cyclical dominance) estimates the number of months required for the short-term trend to dominate the long-term trend. A moving average is computed for 1 or 12 months. MCD is the shortest span of months for which the average component (without regard to sign) in the short-term trend is greater than the irregular component (without regard to sign) in the short-term trend. MCD is shown as "B".

The measures in this appendix provide a historical perspective for interpreting current changes in each series. They are derived using the Census X-1 seasonal adjustment program. Brief definitions of the measures are given below. For complete definitions appear in Economic Compendium and Business Indicators by Julius Shiskin, issued as Occasional Paper 87 by the National Bureau of Economic Research, 1957 (reprinted from Journal of Business, October 1957).

# Appendix C. HISTORICAL DATA

This appendix provides historical data (back to 1945 if available) for selected Defense Indicators series. Data are shown for series which (a) have recently been added to the report, (b) have recently been revised, or (c) have not been shown here for a long time. By keeping these tables, the user can acquire a complete set of historical data. Each time a series is included in this appendix, it is footnoted to indicate the extent of any revisions since it was last shown. See the "Alphabetical Index—Series Finding Guide" for the latest issue in which historical data

were published for each series. Current figures are shown in the basic data tables each month and may be used to update these historical tables.

Official source agency annual figures are shown if available. Such figures may differ slightly from those computed from the monthly or quarterly data appearing in the tables. When both seasonally adjusted and unadjusted data are shown for a series, annual figures are included only for the unadjusted data. Quarterly and annual data are not included for moving averages.

Year	Monthly												Quarterly				Annual
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	I Q	II Q	III Q	IV Q	
643. DEFENSE DEPARTMENT GROSS UNPAID OBLIGATIONS OUTSTANDING, TOTAL, NOT SEASONALLY ADJUSTED (MILLIONS OF DOLLARS)																	
END OF PERIOD																	
1953...	...	...	...	...	...	51,271	50,652	49,497	47,609	43,538	43,679	40,571	...	51,271	47,609	40,571	40,571
1954...	38,361	37,777	36,226	35,291	34,421	33,768	34,133	33,387	33,643	33,538	32,941	33,551	36,226	33,768	33,643	33,551	33,551
1955...	32,222	30,605	30,180	29,729	28,093	27,188	26,180	24,196	24,126	23,418	22,504	23,608	30,180	27,768	24,126	23,608	23,608
1956...	23,644	23,140	24,624	24,732	24,157	25,822	...	...	...	26,754	26,089	25,764	26,704	24,624	25,822	26,754	26,704
1957...	26,135	25,916	26,155	25,909	24,832	25,232	...	...	...	...	22,085	21,786	22,150	26,155	25,232	...	22,150
1958...	21,853	21,408	22,302	22,654	22,747	25,135	...	24,269	24,026	23,802	23,517	23,803	22,302	25,135	24,026	23,803	23,803
1959...	23,450	23,097	23,540	23,273	22,875	24,343	...	23,257	23,054	22,699	22,301	21,664	23,540	24,343	23,054	21,664	21,664
1960...	21,358	20,909	21,033	20,726	20,260	23,116	...	23,643	23,769	23,390	23,359	23,026	21,033	23,116	23,769	23,026	23,026
1961...	22,749	22,695	22,748	22,309	21,435	22,662	...	23,605	24,496	24,726	24,242	24,792	22,748	22,662	24,496	24,792	24,792
1962...	24,682	24,261	24,437	24,465	23,216	24,068	...	24,805	24,783	25,136	25,203	24,796	24,437	24,068	24,783	24,796	24,796
1963...	24,654	24,085	23,748	23,106	21,831	22,573	...	...	...	...	...	...	23,419	23,748	22,573	...	23,419
1964...	23,141	23,539	23,170	22,992	22,575	22,790	...	...	24,089	23,744	23,503	23,624	23,170	22,790	24,089	23,624	23,624
1965...	23,575	23,161	23,106	23,120	22,927	24,429	...	...	...	27,071	27,079	27,094	23,106	24,429	...	27,094	27,094
1966...	27,357	27,151	27,476	28,709	28,685	31,838	...	...	35,554	35,966	35,711	35,450	27,476	31,838	35,554	35,450	35,450
1967...	35,355	35,840	34,420	34,202	34,702	37,267	...	36,793	38,163	38,547	37,641	37,366	34,420	37,267	38,163	37,366	37,366
1968...	38,653	36,454	36,140	35,733	35,590	38,306	...	39,691	41,678	41,906	40,970	39,904	36,140	38,306	41,678	39,904	39,904
1969...	40,124	38,873	37,472	36,150	34,791	35,232	...	34,620	34,857	34,530	33,702	33,109	37,472	35,232	34,857	33,109	33,109
1970...	33,147	31,913	30,770	29,740	28,583	30,510	...	30,372	30,986	30,832	30,807	30,408	30,770	30,510	30,986	30,408	30,408
1971...	30,905	31,098	30,144	29,846	29,170	28,554	...	...	31,286	31,376	32,619	32,110	31,388	30,144	28,554	31,376	31,388
1972...	33,734	33,554	32,480	32,152	30,675	31,347	32,546	33,684	34,563	35,251	35,009	34,601	32,480	31,347	34,563	34,601	34,601
1973...	35,171	35,287	34,766	34,297	33,409	34,621	35,500	37,069	36,829	38,039	37,680	37,244	34,766	34,621	36,829	37,244	37,244
1974...	38,249	37,963	37,249	37,264	36,501	37,545	39,626	40,594	41,055	41,201	40,949	40,407	37,249	37,545	41,055	40,407	40,407
1975...	40,819	40,008	39,473	38,589	37,120	39,557	41,470	43,248	43,084	43,754	42,767	41,551	39,473	39,557	43,084	41,551	41,551
1976...	42,110	41,512	41,046	41,029	39,742	42,152	43,366	42,525	43,351	47,890	48,988	50,354	41,046	42,152	43,351	50,354	50,354
1977...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
643. DEFENSE DEPARTMENT GROSS UNPAID OBLIGATIONS OUTSTANDING, TOTAL, SEASONALLY ADJUSTED <sup>1</sup> (MILLIONS OF DOLLARS)																	
END OF PERIOD																	
1953...	...	...	...	...	...	51,118	50,051	49,349	47,419	45,535	44,707	40,050	...	51,118	47,419	40,050	40,050
1954...	38,361	38,587	35,974	34,907	34,769	33,567	33,695	33,287	33,442	33,673	33,716	33,186	35,974	33,567	33,442	33,186	33,186
1955...	32,254	31,293	30,030	29,435	28,405	26,919	25,793	24,076	23,911	23,512	23,034	23,374	30,030	26,919	23,911	23,374	23,374
1956...	23,715	23,685	24,526	24,536	24,475	25,440	...	...	26,463	26,168	26,344	26,518	24,526	25,440	26,463	26,518	26,518
1957...	26,293	26,581	26,129	25,857	25,287	24,762	...	...	...	22,107	22,140	22,062	26,129	24,762	...	22,062	22,062
1958...	22,051	21,957	22,369	22,768	23,330	24,666	...	23,910	23,555	23,684	23,755	23,755	22,369	24,666	23,555	23,755	23,755
1959...	23,663	23,641	23,682	23,532	23,656	24,007	...	22,846	22,558	22,452	22,323	21,599	23,682	24,007	22,558	21,599	21,599
1960...	21,509	21,314	21,203	21,042	21,148	22,955	...	23,225	23,257	23,022	23,220	22,866	21,203	22,955	23,257	22,866	22,866
1961...	22,795	23,041	22,931	22,718	22,539	22,707	...	23,210	23,945	24,241	23,955	24,522	22,931	22,707	23,945	24,522	24,522
1962...	24,633	24,506	24,639	24,439	24,515	24,242	...	24,463	24,179	24,547	24,831	24,430	24,639	24,242	24,515	24,242	24,242
1963...	24,531	24,304	24,056	23,602	23,126	22,824	...	...	...	...	...	...	24,056	22,824	...	22,824	22,824
1964...	23,003	23,777	23,595	23,557	23,914	23,043	...	...	23,365	23,008	23,042	23,275	23,595	23,043	23,365	23,275	23,275
1965...	23,434	23,466	23,698	23,762	24,261	24,651	...	...	...	26,105	26,496	26,746	23,698	24,651	...	26,746	26,746
1966...	27,275	27,621	28,355	29,597	30,322	32,030	...	...	34,154	34,583	34,942	35,064	28,355	32,030	34,154	35,064	35,064
1967...	35,350	35,719	35,668	35,296	36,683	37,417	...	36,249	36,625	36,993	36,831	37,033	35,668	37,417	36,625	37,033	37,033
1968...	36,616	37,236	37,490	36,914	37,622	38,421	...	39,104	39,960	40,178	40,127	39,587	37,490	38,421	39,960	39,587	39,587
1969...	39,531	39,147	38,472	37,656	36,855	35,445	...	34,414	33,613	33,234	32,912	32,781	38,472	35,445	33,613	32,781	32,781
1970...	32,561	32,041	31,494	30,979	30,279	30,787	...	30,221	29,938	29,703	30,085	30,077	31,494	30,787	29,938	30,077	30,077
1971...	30,181	30,851	30,541	30,737	31,098	29,077	...	...	31,069	30,671	31,546	31,046	30,541	29,077	30,671	31,046	31,046
1972...	32,879	32,832	32,742	32,976	32,772	32,417	33,109	33,350	33,985	34,026	34,255	34,225	32,742	32,417	33,985	34,225	34,225
1973...	34,280	34,426	34,976	35,140	35,693	35,877	36,188	36,666	36,285	36,682	36,869	36,839	34,976	35,877	36,285	36,839	36,839
1974...	37,446	37,673	37,817	38,456	38,389	38,909	39,741	39,621	39,894	39,429	39,772	40,137	37,817	38,909	39,894	40,137	40,137
1975...	40,052	39,875	40,198	39,918	40,086	40,959	41,437	42,140	41,805	41,845	41,468	41,309	40,198	40,959	41,805	41,309	41,309
1976...	41,358	41,459	41,866	42,494	42,970	43,612	43,251	41,406	42,047	45,813	47,517	50,103	41,866	43,612	42,047	50,103	50,103
1977...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
644. DEFENSE DEPARTMENT GROSS UNPAID OBLIGATIONS OUTSTANDING, OPERATIONS, NOT SEASONALLY ADJUSTED (MILLIONS OF DOLLARS)																	
END OF PERIOD																	
1966...	...	...	...	...	...	...	...	...	...	...	...	...	3,828	3,777	4,792	5,024	5,024
1967...	5,041	4,892	4,644	4,761	4,765	4,513	...	5,115	5,267	5,270	5,050	5,150	4,644	4,513	5,267	5,150	5,150
1968...	5,127	5,127	4,975	4,938	4,577	4,952	...	5,887	6,077	6,477	6,052	5,445	4,975	4,952	6,077	5,445	5,445
1969...	6,141	5,638	5,528	5,315	5,010	4,676	...	5,600	5,488	5,593	5,348	5,094	5,528	4,676	5,488	5,094	5,094
1970...	5,236	4,912	4,726	4,631	4,403	4,490	...	5,095	5,015	5,224	5,082	4,764	4,726	4,490	5,015	4,764	4,764
1971...	5,072	4,791	4,479	4,534	4,342	4,277	...	5,186	5,092	5,586	5,366	4,933	4,479	4,077	5,092	4,933	4,933
1972...	5,303	5,021	4,635	4,439	3,891	4,211	4,739	5,043	5,349	5,845	5,671	5,438	4,635	4,211	5,349	5,438	5,438
1973...	5,741	5,589	5,273	5,424	5,227	5,301	6,200	6,754	6,719	7,519	7,193	7,064	5,273	5,301	6,719	7,064	7,064
1974...	7,425	7,055	6,779	7,044	6,476	7,733	8,149	8,426	8,311	8,607	7,906	7,654	6,779	7,733	8,311	7,654	7,654
1975...	7,997	7,520	7,169	7,276	6,746	7,303	8,733	8,677	8,677	9,259	8,804	8,261	7,169	7,303	8,677	8,261	8,261
1976...	8,947	8,538	7,966	8,253	7,795	8,037	8,939	8,569	8,615	10,624	10,700	10,374	7,966	8,037	8,615	10,374	10,374



# Appendix C. HISTORICAL DATA—Continued

Year	Monthly												Quarterly				Annual
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	I Q	II Q	III Q	IV Q	
645. DEFENSE DEPARTMENT GROSS UNPAID OBLIGATIONS OUTSTANDING, PROCUREMENT, NOT SEASONALLY ADJUSTED (MILLIONS OF DOLLARS)																	
																	END OF PERIOD
1966...	...	...	...	...	...	...	...	...	...	...	...	...	18,023	22,119	22,736	23,173	23,173
1967...	23,134	22,982	22,780	22,613	22,947	25,248	...	23,874	24,925	25,423	24,982	24,896	22,780	25,248	24,925	24,856	24,856
1968...	24,187	24,024	24,127	23,947	24,370	26,244	...	25,912	27,361	27,278	26,950	26,658	24,695	25,704	27,361	26,658	26,658
1969...	26,160	25,396	24,412	23,574	22,560	23,215	...	21,227	21,758	21,437	21,034	21,009	24,412	23,215	21,758	21,009	21,009
1970...	20,752	20,071	19,231	18,512	17,843	19,391	...	17,912	18,435	18,327	18,440	18,563	19,231	19,391	18,435	18,563	18,563
1971...	18,855	18,924	18,411	18,268	17,857	18,522	...	18,783	19,059	19,797	19,056	20,372	18,411	18,522	19,059	20,372	20,372
1972...	21,702	21,877	21,637	21,360	20,672	20,982	20,570	20,813	21,237	21,645	21,836	22,023	21,637	20,982	21,237	22,023	22,023
1973...	22,326	22,721	22,469	22,044	21,753	22,806	22,100	22,432	22,195	22,679	22,877	22,932	22,469	22,806	22,195	22,932	22,932
1974...	23,791	24,032	23,847	23,778	23,123	23,994	24,316	23,791	24,283	24,361	25,147	25,199	23,847	23,994	24,283	25,199	25,199
1975...	25,484	25,452	25,688	24,932	24,321	25,311	25,167	26,070	26,002	26,081	25,810	25,307	25,688	25,311	26,002	25,307	25,307
1976...	25,503	25,586	25,783	25,606	25,125	26,508	26,537	26,346	26,832	27,632	28,934	29,348	25,783	26,508	26,832	29,348	29,348
1977...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
645. DEFENSE DEPARTMENT GROSS UNPAID OBLIGATIONS OUTSTANDING, PROCUREMENT, SEASONALLY ADJUSTED (MILLIONS OF DOLLARS)																	
																	END OF PERIOD
1966...	...	...	...	...	...	...	...	...	...	...	...	...	18,187	22,617	22,817	22,368	22,368
1967...	22,882	23,131	23,340	23,604	24,028	24,753	...	24,336	24,270	24,779	24,420	24,273	23,340	24,753	24,270	24,273	24,273
1968...	23,934	24,120	24,695	24,997	25,518	25,704	...	26,414	26,668	26,613	26,318	26,008	24,695	25,704	26,668	26,008	26,008
1969...	25,875	25,524	24,987	24,574	23,623	23,738	...	21,638	21,186	20,894	20,541	20,477	24,987	23,738	21,186	20,477	20,477
1970...	20,526	20,172	19,684	19,324	18,684	19,011	...	18,259	18,325	18,146	18,257	18,235	19,684	19,011	18,325	18,235	18,235
1971...	18,395	18,553	18,485	18,660	18,640	18,266	...	19,265	19,040	19,659	18,886	20,208	18,485	18,266	19,040	20,208	20,208
1972...	21,131	21,364	21,680	21,774	21,578	20,692	20,820	21,347	21,280	21,537	21,663	21,634	21,680	20,692	21,280	21,634	21,634
1973...	21,718	21,953	22,291	22,424	22,565	22,555	22,620	22,960	22,556	22,656	22,763	22,615	22,291	22,555	22,556	22,615	22,615
1974...	23,143	23,175	23,634	23,970	23,987	23,756	24,914	24,351	24,703	24,337	25,022	25,024	23,634	23,756	24,351	25,024	25,024
1975...	24,838	24,568	25,259	24,932	25,099	25,438	25,370	26,684	26,479	26,238	25,707	25,305	25,259	25,438	26,479	25,305	25,305
1976...	24,905	24,841	25,277	25,657	25,929	26,482	27,162	26,802	27,185	27,827	28,733	29,202	25,277	26,482	27,185	29,202	29,202
1977...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
680. DEFENSE DEPARTMENT NET OUTLAYS, TOTAL, MILITARY FUNCTIONS AND MILITARY ASSISTANCE, NOT SEASONALLY ADJUSTED (MILLIONS OF DOLLARS)																	
																	TOTAL FOR PERIOD
1949...	...	...	...	...	...	...	1,005	1,126	986	967	1,009	1,067	...	...	3,117	3,043	...
1950...	993	916	1,019	937	1,002	824	974	1,116	1,033	1,283	1,464	1,530	2,928	2,763	3,123	4,277	13,091
1951...	1,651	1,643	2,060	2,170	2,463	2,609	2,978	3,052	2,630	3,242	3,174	3,223	5,354	7,242	8,660	9,439	30,895
1952...	3,534	3,292	3,585	3,929	3,907	3,747	4,098	3,206	4,084	3,923	3,497	4,272	10,411	11,583	11,388	11,692	45,074
1953...	3,814	3,735	4,216	4,191	3,957	4,316	4,352	3,720	3,862	3,947	3,472	3,961	11,765	12,464	11,034	11,380	46,643
1954...	3,368	3,397	3,574	3,425	3,112	4,270	2,704	3,013	3,013	3,087	3,024	3,428	10,337	10,807	8,898	9,539	39,581
1955...	2,963	2,862	3,357	3,132	3,099	3,792	2,638	3,190	3,405	3,013	2,923	3,292	9,182	10,023	9,233	9,228	37,666
1956...	2,970	3,002	3,082	3,096	3,227	4,436	2,666	3,368	2,983	3,559	3,351	3,362	9,054	10,759	9,017	10,072	39,102
1957...	3,535	3,374	3,490	3,629	3,699	3,774	3,441	3,658	3,207	3,389	3,240	3,467	10,399	11,102	10,306	10,096	41,903
1958...	3,449	3,275	3,339	3,412	3,408	4,063	3,491	3,323	3,643	3,971	3,356	3,981	9,963	10,883	10,457	11,308	42,611
1959...	3,460	3,385	3,634	3,674	3,409	4,275	3,513	3,467	3,586	3,715	3,465	3,968	10,449	11,358	10,538	11,148	43,493
1960...	3,277	3,488	3,749	3,438	3,488	3,737	3,249	3,730	3,679	3,510	3,647	3,986	10,514	10,623	10,658	11,143	42,938
1961...	3,497	3,550	4,043	3,526	3,891	4,368	3,205	3,808	3,646	3,837	4,035	4,072	11,090	11,785	10,659	11,944	45,478
1962...	4,044	3,868	4,338	4,046	4,528	4,778	3,692	4,208	3,823	4,360	4,331	4,125	12,250	13,352	11,723	12,816	50,141
1963...	4,304	3,937	3,289	4,289	4,244	4,370	3,973	4,156	4,015	4,391	4,321	4,290	11,530	12,903	12,144	12,602	49,179
1964...	4,117	4,040	4,143	4,321	4,418	5,461	3,264	3,544	3,976	3,985	3,792	4,244	12,300	14,200	10,784	12,021	49,305
1965...	3,770	3,644	4,288	4,145	4,045	4,704	3,627	4,162	4,354	4,295	4,326	4,907	11,702	12,894	12,143	13,528	50,267
1966...	4,403	4,297	5,397	4,811	4,673	6,125	4,667	5,404	5,773	5,346	5,339	5,757	14,097	15,609	15,844	16,442	61,992
1967...	5,962	5,579	6,695	6,117	5,934	5,963	6,166	6,587	6,356	6,436	6,194	5,825	18,236	18,014	19,109	18,455	73,814
1968...	6,977	6,218	6,121	6,906	6,986	7,368	5,610	6,502	6,484	6,816	6,415	6,679	19,316	21,260	18,596	19,910	79,082
1969...	6,644	6,234	6,626	6,726	6,531	7,408	6,330	6,667	6,536	7,053	6,123	6,616	19,504	20,665	19,553	19,792	79,514
1970...	6,475	6,028	6,419	6,604	6,323	6,692	6,630	6,082	6,178	6,161	5,781	6,551	18,922	19,619	18,890	18,493	75,824
1971...	5,985	5,813	6,504	6,131	5,838	7,689	5,001	5,441	5,840	5,943	5,972	6,498	18,299	19,858	16,282	18,413	72,859
1972...	5,973	6,128	6,944	6,539	6,911	8,769	4,887	5,679	5,212	6,107	6,313	6,063	19,445	22,219	15,878	18,483	73,625
1973...	6,388	6,054	6,736	6,222	6,213	7,854	5,005	6,649	5,967	6,527	6,766	5,953	19,178	20,289	17,621	19,246	76,334
1974...	6,728	6,384	6,702	6,685	7,204	7,872	5,979	6,897	6,948	7,271	7,473	7,451	19,814	21,761	19,824	22,195	83,594
1975...	7,051	7,258	7,244	7,190	7,780	7,476	7,124	7,961	6,631	7,913	7,203	7,695	21,553	22,446	21,716	22,811	88,526
1976...	6,649	6,962	7,642	7,872	7,042	7,843	7,433	7,163	7,513	7,478	7,301	7,422	21,253	22,757	22,109	22,201	88,320
1977...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
680. DEFENSE DEPARTMENT NET OUTLAYS, TOTAL, MILITARY FUNCTIONS AND MILITARY ASSISTANCE, SEASONALLY ADJUSTED (MILLIONS OF DOLLARS)																	
																	TOTAL FOR PERIOD
1949...	...	...	...	...	...	...	1,078	1,076	1,040	1,011	1,008	1,014	...	...	3,194	3,033	...
1950...	1,015	998	950	960	954	768	1,049	1,055	1,132	1,291	1,458	1,533	2,963	2,742	3,123	4,282	13,891
1951...	1,630	1,783	1,975	2,154	2,317	2,523	3,133	2,911	2,983	3,129	3,167	3,224	5,388	6,994	9,027	9,520	30,895
1952...	3,460	3,412	3,613	3,747	3,804	3,591	4,196	3,328	4,229	3,742	3,843	3,965	10,485	11,142	11,753	11,550	45,074
1953...	3,861	4,022	4,107	3,989	4,079	3,867	3,621	3,868	3,981	3,847	3,721	3,631	11,990	11,935	11,470	11,199	45,074
1954...	3,600	3,643	3,369	3,270	3,220	3,758	3,041	3,381	3,062	3,088	3,062	3,088	10,485	11,142	11,753	11,550	45,074
1955...	3,172	3,046	3,149	3,151	3,118	3,253	3,049	3,097	3,447	3,069	3,010	3,123	9,367	9,522	9,593	9,402	30,895
1956...	3,077	3,059	3,004	3,166	3,121	3,817	2,950	3,254	3,288	3,364	3,399	3,359	9,140	10,204	9,492	10,122	30,895
1957...	3,508	3,580	3,601	3,562	3,621	3,455	3,642	3,353	3,412	3,173	3,416	3,335	10,689	10,638	10,687	9,924	30,895
1958...	3,453	3,476	3,435	3,428	3,507	3,429	3,657	3,486	3,461	3,7							



# Appendix C. HISTORICAL DATA—Continued

Year	Monthly												Quarterly				Annual
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	I Q	II Q	III Q	IV Q	
680. DEFENSE DEPARTMENT NET OUTLAYS, TOTAL, MILITARY FUNCTIONS AND MILITARY ASSISTANCE, 6-MONTH MOVING AVERAGE OF SEASONALLY ADJUSTED DATA (MILLIONS OF DOLLARS)																	
1949...	...	...	...	...	...	...	...	...	...	1,038	1,027	1,014					
1950...	...	...	...	...	...	...	...	...	...	1,126	1,253	1,350	1,471				
1951...	1,612	1,756	1,899	2,064	2,314	2,502	2,670	2,833	2,974	3,091	3,146	3,229	3,311				
1952...	3,334	3,437	3,543	3,605	3,727	3,713	3,816	3,815	3,822	3,884	3,828	3,944					
1953...	3,923	3,965	4,004	3,988	3,948	3,922	3,901	3,877	3,818	3,778	3,775	3,737					
1954...	3,635	3,539	3,456	3,477	3,384	3,296	3,245	3,226	3,208	3,108	3,130	3,118					
1955...	3,133	3,131	3,133	3,148	3,128	3,136	3,106	3,172	3,154	3,133	3,137	3,131					
1956...	3,057	3,073	3,092	3,224	3,203	3,235	3,283	3,316	3,362	3,269	3,362	3,416					
1957...	3,469	3,502	3,539	3,555	3,577	3,586	3,554	3,489	3,455	3,435	3,389	3,362					
1958...	3,366	3,400	3,402	3,447	3,493	3,495	3,537	3,601	3,639	3,652	3,644	3,655					
1959...	3,638	3,616	3,608	3,599	3,616	3,632	3,636	3,637	3,640	3,638	3,620	3,601					
1960...	3,586	3,571	3,547	3,474	3,498	3,520	3,548	3,563	3,588	3,684	3,674	3,690					
1961...	3,709	3,735	3,756	3,749	3,757	3,749	3,751	3,760	3,798	3,856	3,914	3,977					
1962...	4,039	4,098	4,148	4,181	4,199	4,206	4,201	4,205	4,203	4,180	4,193	4,200					
1963...	4,062	4,065	4,025	4,014	4,031	4,035	4,181	4,174	4,181	4,199	4,149	4,158					
1964...	4,126	4,134	4,217	4,302	4,221	4,139	4,131	4,078	3,984	3,865	3,936	3,958					
1965...	3,960	3,979	4,014	4,027	4,039	4,099	4,149	4,218	4,249	4,349	4,444	4,504					
1966...	4,611	4,683	4,738	4,834	4,982	5,098	5,214	5,321	5,448	5,516	5,601	5,719					
1967...	5,801	5,957	6,010	5,915	6,124	6,188	6,245	6,235	6,325	6,486	6,405	6,395					
1968...	6,327	6,381	6,478	6,603	6,474	6,474	6,580	6,542	6,516	6,528	6,603	6,665					
1969...	6,656	6,855	6,740	6,603	6,635	6,656	6,634	6,676	6,685	6,682	6,645	6,586					
1970...	6,540	6,469	6,411	6,261	6,396	6,402	6,415	6,384	6,330	6,445	6,261	6,202					
1971...	6,169	6,115	6,097	6,130	6,058	5,983	5,963	6,017	6,032	5,978	6,063	6,145					
1972...	6,209	6,306	6,398	6,550	6,521	6,448	6,308	6,228	6,174	6,024	6,049	6,151					
1973...	6,295	6,288	6,220	6,281	6,235	6,291	6,330	6,371	6,503	6,441	6,534	6,535					
1974...	6,524	6,527	6,537	6,648	6,712	6,801	6,956	7,068	7,213	7,328	7,302	7,350					
1975...	7,312	7,284	7,258	7,056	7,308	7,475	7,423	7,552	7,566	7,788	7,515	7,251					
1976...	7,326	7,322	7,259	7,068	7,406	7,486	7,563	7,546	7,562	7,657	7,477	7,614					
1977...																	
681. DEFENSE DEPARTMENT NET OUTLAYS, OPERATIONS, NOT SEASONALLY ADJUSTED (MILLIONS OF DOLLARS)																	
												TOTAL FOR PERIOD					
1959...	...	...	...	...	...	...	1,875	1,826	1,854	1,940	1,811	1,936	...	...	5,555	5,687	...
1960...	1,676	1,837	1,947	1,698	1,806	1,877	1,816	1,992	1,936	1,862	1,878	1,950	5,460	5,381	5,734	5,690	22,265
1961...	1,813	1,798	1,950	1,787	1,950	2,128	1,736	2,034	1,962	2,036	2,109	2,061	5,561	5,865	5,732	6,206	23,364
1962...	2,048	1,970	2,073	2,034	2,295	2,312	1,879	2,226	1,921	2,171	2,038	2,079	6,091	6,641	6,026	6,288	25,046
1963...	2,030	2,000	2,004	2,037	2,177	2,282	2,045	2,087	2,068	2,233	2,148	2,131	6,034	6,496	6,200	6,512	25,242
1964...	2,146	2,098	2,071	2,246	2,148	2,706	2,027	2,187	2,215	2,326	2,169	2,251	6,315	7,100	6,429	6,746	26,590
1965...	2,243	2,058	2,233	2,368	2,143	2,900	2,170	2,192	2,378	2,601	2,624	2,732	6,534	7,411	6,740	7,957	28,642
1966...	2,524	2,477	2,689	2,765	2,700	3,611	2,475	3,024	3,469	3,081	2,997	3,009	7,690	9,076	8,968	9,087	34,821
1967...	3,267	3,219	3,516	3,416	3,335	3,980	2,898	3,722	3,382	3,641	3,456	3,397	10,002	10,731	10,002	10,494	41,229
1968...	3,550	3,273	3,416	3,622	3,759	4,417	3,237	3,732	3,896	3,725	3,779	4,001	10,239	11,798	10,865	11,505	44,407
1969...	3,631	3,761	3,609	4,037	3,907	4,727	3,527	4,187	3,885	4,095	3,920	3,855	11,001	12,671	11,599	11,870	47,141
1970...	3,877	3,680	3,782	4,186	4,011	4,482	3,844	3,859	3,887	3,868	3,615	3,971	11,339	12,679	11,599	11,454	47,062
1971...	3,687	3,685	3,954	4,031	3,745	4,812	3,632	3,710	3,825	3,845	3,877	4,168	11,326	12,588	11,267	11,910	46,991
1972...	3,971	4,013	4,307	4,294	4,535	4,271	3,972	3,928	3,805	3,925	4,084	4,012	12,291	13,100	11,705	12,021	49,117
1973...	4,119	3,988	4,217	4,087	4,033	4,537	3,669	4,279	4,027	4,105	4,359	4,066	12,324	12,657	11,975	12,530	49,486
1974...	4,376	4,137	4,398	4,367	4,718	4,835	4,628	4,804	4,575	4,817	4,912	4,742	12,911	13,920	14,007	14,471	55,309
1975...	4,775	4,727	4,736	4,960	4,909	4,954	4,918	5,081	4,810	5,260	4,997	5,078	14,238	14,823	14,809	15,335	59,205
1976...	4,887	4,848	5,026	5,297	4,889	5,170	5,050	5,059	5,457	4,984	5,277	5,356	14,761	15,356	15,566	15,617	61,300
1977...																	
681. DEFENSE DEPARTMENT NET OUTLAYS, OPERATIONS, SEASONALLY ADJUSTED <sup>1</sup> (MILLIONS OF DOLLARS)																	
												TOTAL FOR PERIOD					
1959...	...	...	...	...	...	...	1,933	1,851	1,840	1,886	1,852	1,836	...	...	5,624	5,574	...
1960...	1,791	1,849	1,924	1,763	1,830	1,658	1,992	1,896	1,923	1,866	1,858	1,897	5,564	5,251	5,811	5,621	
1961...	1,915	1,884	1,903	1,919	1,902	1,875	1,932	1,953	1,996	2,001	2,078	2,058	5,702	5,696	5,801	6,137	
1962...	2,070	2,071	2,111	2,107	2,250	2,053	2,069	2,117	2,036	2,050	2,014	2,108	6,252	6,410	6,222	6,172	
1963...	2,050	2,113	2,099	2,051	2,114	2,058	2,187	2,071	2,142	2,111	2,174	2,140	6,262	6,223	6,400	6,425	
1964...	2,114	2,197	2,152	2,202	2,234	2,286	2,166	2,253	2,236	2,241	2,215	2,202	6,463	6,722	6,655	6,658	
1965...	2,331	2,191	2,234	2,312	2,266	2,376	2,434	2,223	2,396	2,553	2,643	2,656	6,756	6,954	7,053	7,852	
1966...	2,618	2,642	2,701	2,741	2,826	2,922	2,862	2,962	3,517	3,038	2,986	3,049	7,961	8,489	9,341	9,073	
1967...	3,304	3,445	3,481	3,496	3,371	3,221	3,429	3,581	3,437	3,580	3,429	3,526	10,230	10,088	10,447	10,543	
1968...	3,498	3,383	3,557	3,590	3,702	3,777	3,666	3,653	3,955	3,594	3,844	4,162	10,438	11,069	11,274	11,600	
1969...	3,512	4,012	3,824	3,903	4,015	3,958	4,017	4,107	3,920	3,883	4,090	3,904	11,348	11,876	12,044	11,877	
1970...	3,920	3,917	3,886	3,965	4,048	3,820	4,078	4,015	3,932	3,935	3,741	3,824	11,723	11,833	12,025	11,600	
1971...	3,769	3,877	3,911	3,822	3,842	4,026	3,972	3,832	3,867	3,971	3,996	4,059	11,557	11,690	11,871	12,026	
1972...	4,144	4,069	4,112	4,248	4,459	4,615	4,436	3,937	3,975	4,079	4,074	4,093	12,325	12,322	12,348	12,246	
1973...	4,107	4,162	4,167	3,970	3,946	3,935	4,018	4,228	4,316	4,156	4,378	4,226	12,436	11,851	12,562	12,760	
1974...	4,333	4,313	4,364	4,221	4,536	4,444	4,717	4,805	4,736	4,839	4,828	4,815	13,010	13,401	14,258	14,482	
1975...	4,648	4,924	4,831	4,856	4,941	4,747	4,977	5,029	5,016	5,131	4,988	5,067	14,403	14,544	15,022	15,186	
1976...	4,940	4,879	4,995	5,160	5,023	4,925	5,135	5,054	5,543	5,015	5,220	5,190	14,814	15,108	15,732	15,425	
1977...																	

NOTE: Unless otherwise noted, these series contain no revisions but are reprinted for the convenience of the user. <sup>1</sup>This series contains revisions beginning with 1974

# Appendix C. HISTORICAL DATA—Continued

Year	Monthly												Quarterly				Annual
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	I Q	II Q	III Q	IV Q	
682. DEFENSE DEPARTMENT NET OUTLAYS, PROCUREMENT, NOT SEASONALLY ADJUSTED (MILLIONS OF DOLLARS)																	
TOTAL FOR PERIOD																	
1953...	...	...	...	...	...	...	1,204	1,586	1,491	1,617	1,127	1,107	...	...	4,281	3,851	...
1954...	1,369	1,441	1,297	1,164	1,089	1,468	1,032	1,318	1,103	1,289	1,189	1,394	4,107	3,721	3,453	3,872	15,153
1955...	1,165	1,050	1,326	1,163	1,276	1,462	952	1,137	1,130	1,109	1,024	1,236	3,541	3,901	3,219	3,369	14,030
1956...	1,005	1,175	1,105	1,221	1,174	1,987	901	1,121	1,005	1,264	1,223	1,274	3,285	4,382	3,027	3,761	14,455
1957...	1,361	1,352	1,391	1,471	1,377	1,661	1,351	1,364	1,219	1,156	1,302	1,392	4,104	4,509	3,934	3,850	16,397
1958...	1,271	1,333	1,409	1,380	1,374	1,630	1,260	1,210	1,330	1,482	1,307	1,494	4,013	4,384	3,800	4,283	16,480
1959...	1,264	1,319	1,365	1,412	1,325	1,758	1,197	1,191	1,450	1,475	1,266	1,478	3,948	4,495	3,838	4,219	16,500
1960...	1,094	1,173	1,227	1,230	1,119	289	1,044	1,127	1,200	1,184	1,239	1,399	3,494	2,638	3,371	3,822	13,325
1961...	1,126	1,257	1,432	1,209	1,317	1,407	1,105	1,181	1,229	1,204	1,317	1,391	3,815	3,933	3,515	3,912	15,175
1962...	1,307	1,287	1,474	1,345	1,456	1,606	1,133	1,314	1,216	1,283	1,403	1,311	4,068	4,407	3,663	3,997	16,135
1963...	1,362	1,239	1,353	1,420	1,665	1,962	1,198	1,204	1,198	1,336	1,234	1,256	3,954	5,047	3,600	3,826	16,427
1964...	1,132	1,234	1,147	1,203	1,493	1,715	1,001	825	969	970	968	1,482	3,513	4,411	2,795	3,420	14,139
1965...	917	873	1,081	1,077	1,077	601	1,162	1,124	1,056	1,046	955	1,460	2,871	2,755	3,342	3,461	12,429
1966...	1,095	1,070	1,486	1,177	1,039	1,669	1,560	1,367	1,465	1,293	1,343	1,628	3,651	3,885	4,392	4,264	16,192
1967...	1,680	1,491	1,903	1,783	1,850	1,649	2,037	1,982	2,041	2,005	1,890	1,704	5,074	5,282	6,060	5,599	22,015
1968...	2,274	1,913	1,680	2,109	1,608	2,041	1,627	2,053	1,944	2,081	2,015	1,985	5,867	5,758	5,624	6,081	23,330
1969...	2,089	1,950	2,158	2,009	1,921	2,156	1,758	1,861	1,884	2,063	1,688	1,840	6,197	6,086	5,503	5,591	23,377
1970...	1,698	1,632	2,035	1,804	1,687	1,633	1,807	1,845	1,694	1,590	1,509	1,734	5,365	5,124	5,046	4,833	20,368
1971...	1,440	1,423	1,549	1,343	1,346	1,878	895	1,143	1,313	1,317	1,322	1,366	4,412	4,567	3,351	4,005	16,335
1972...	1,276	1,367	1,666	1,456	1,621	2,390	1,675	975	1,072	1,306	1,254	1,084	4,309	5,467	3,722	3,644	17,142
1973...	1,355	1,243	1,439	1,287	1,315	1,649	963	1,450	1,239	1,487	1,268	1,124	4,037	4,251	3,552	3,879	15,719
1974...	1,270	1,195	1,313	1,382	1,292	1,346	801	1,348	1,251	1,455	1,372	1,339	3,778	4,020	3,400	4,266	15,464
1975...	1,427	1,351	1,500	1,220	1,467	1,409	1,225	1,559	1,191	1,500	1,081	1,319	4,278	4,096	3,975	3,900	16,249
1976...	1,363	1,227	1,195	1,192	1,092	1,418	1,347	1,063	1,356	1,337	1,502	1,745	3,785	4,302	3,766	4,584	16,437
1977...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
682. DEFENSE DEPARTMENT NET OUTLAYS, PROCUREMENT, SEASONALLY ADJUSTED (MILLIONS OF DOLLARS)																	
TOTAL FOR PERIOD																	
1953...	...	...	...	...	...	...	1,461	1,614	1,569	1,511	1,311	993	...	...	4,644	3,815	...
1954...	1,436	1,433	1,258	1,129	1,187	1,168	1,240	1,305	1,181	1,253	1,398	1,276	4,127	3,484	3,734	3,827	...
1955...	1,259	1,046	1,244	1,148	1,341	1,180	1,179	1,123	1,197	1,111	1,082	1,136	3,549	3,669	3,499	3,329	...
1956...	1,060	1,137	1,054	1,257	1,170	1,609	1,096	1,131	1,114	1,200	1,270	1,247	3,251	4,036	3,341	3,717	...
1957...	1,384	1,357	1,374	1,429	1,387	1,399	1,592	1,422	1,351	1,067	1,348	1,312	4,115	4,215	4,365	3,727	...
1958...	1,233	1,345	1,422	1,328	1,376	1,409	1,433	1,342	1,367	1,396	1,382	1,370	4,100	4,113	4,142	4,148	...
1959...	1,336	1,340	1,318	1,391	1,362	1,464	1,377	1,370	1,454	1,484	1,335	1,315	3,994	4,217	4,201	4,054	...
1960...	1,200	1,184	1,122	1,228	1,118	245	1,240	1,230	1,197	1,218	1,211	1,274	3,506	2,591	3,667	3,703	...
1961...	1,227	1,301	1,340	1,248	1,243	1,193	1,339	1,250	1,255	1,219	1,303	1,323	3,868	3,684	3,844	3,845	...
1962...	1,387	1,349	1,391	1,394	1,290	1,407	1,295	1,400	1,303	1,296	1,388	1,278	4,127	4,091	3,998	3,962	...
1963...	1,399	1,319	1,326	1,395	1,465	1,795	1,290	1,270	1,318	1,341	1,274	1,181	4,044	4,655	3,878	3,796	...
1964...	1,171	1,301	1,111	1,183	1,356	1,527	1,016	920	999	1,004	1,085	1,318	3,583	4,066	2,935	3,407	...
1965...	979	960	1,016	1,051	1,004	535	1,131	1,204	1,103	1,134	1,043	1,317	2,955	2,590	3,438	3,494	...
1966...	1,191	1,190	1,343	1,171	1,446	1,541	1,520	1,423	1,503	1,445	1,486	1,463	3,724	3,658	4,446	4,394	...
1967...	1,762	1,670	1,732	1,840	1,843	1,396	2,199	1,954	2,056	2,062	2,010	1,722	5,164	5,079	6,209	5,794	...
1968...	2,223	1,981	1,637	2,035	1,649	1,861	1,675	2,021	2,033	2,004	2,126	2,011	5,841	5,545	5,729	6,141	...
1969...	2,032	2,116	2,133	1,948	1,989	1,954	1,795	1,936	1,944	1,993	1,857	1,835	6,281	5,891	5,575	5,685	...
1970...	1,717	1,750	1,905	1,756	1,780	1,376	1,856	1,671	1,693	1,545	1,644	1,731	5,372	4,912	5,220	4,920	...
1971...	1,546	1,526	1,382	1,310	1,399	1,557	924	1,221	1,323	1,346	1,384	1,390	4,454	4,266	3,468	4,120	...
1972...	1,372	1,391	1,476	1,528	1,564	1,952	1,810	1,002	1,111	1,299	1,331	1,189	4,239	5,044	3,923	3,819	...
1973...	1,367	1,329	1,291	1,330	1,243	1,371	907	1,513	1,344	1,425	1,349	1,250	3,987	3,944	3,764	4,024	...
1974...	1,262	1,276	1,241	1,355	1,227	1,165	810	1,425	1,343	1,377	1,501	1,569	3,779	3,747	3,578	4,447	...
1975...	1,428	1,444	1,440	1,194	1,406	1,215	1,268	1,634	1,217	1,425	1,720	1,429	4,312	3,815	4,119	4,072	...
1976...	1,384	1,293	1,082	1,084	1,095	1,244	1,326	1,055	1,423	1,303	1,617	1,781	3,759	4,223	3,804	4,701	...
1977...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
682. DEFENSE DEPARTMENT NET OUTLAYS, PROCUREMENT, 6-MONTH MOVING AVERAGE OF SEASONALLY ADJUSTED DATA (MILLIONS OF DOLLARS)																	
TOTAL FOR PERIOD																	
1953...	...	...	...	...	...	...	...	...	...	1,410	1,406	1,376	...	...	...	...	...
1954...	1,324	1,260	1,239	1,268	1,237	1,216	1,203	1,224	1,242	1,260	1,262	1,219	...	...	...	...	...
1955...	1,229	1,212	1,219	1,203	1,190	1,202	1,195	1,189	1,145	1,138	1,118	1,121	...	...	...	...	...
1956...	1,097	1,121	1,135	1,214	1,220	1,219	1,229	1,220	1,237	1,176	1,224	1,262	...	...	...	...	...
1957...	1,306	1,344	1,363	1,389	1,423	1,434	1,430	1,370	1,363	1,349	1,305	1,293	...	...	...	...	...
1958...	1,304	1,348	1,352	1,369	1,385	1,385	1,376	1,387	1,388	1,382	1,366	1,365	...	...	...	...	...
1959...	1,357	1,356	1,353	1,369	1,375	1,380	1,403	1,405	1,401	1,376	1,346	1,315	...	...	...	...	...
1960...	1,260	1,230	1,194	1,016	1,023	1,030	1,043	1,041	1,057	1,228	1,226	1,238	...	...	...	...	...
1961...	1,262	1,267	1,272	1,258	1,277	1,269	1,255	1,250	1,260	1,281	1,289	1,306	...	...	...	...	...
1962...	1,328	1,358	1,356	1,370	1,354	1,363	1,348	1,332	1,348	1,327	1,344	1,331	...	...	...	...	...
1963...	1,334	1,351	1,364	1,450	1,432	1,424	1,422	1,413	1,381	1,279	1,259	1,264	...	...	...	...	...
1964...	1,230	1,203	1,217	1,275	1,249	1,185	1,167	1,137	1,092	1,057	1,051	1,058	...	...	...	...	...
1965...	1,060	1,068	1,054	924	949	990	1,005	1,019	1,025	1,155	1,165	1,163	...	...	...	...	...
1966...	1,203	1,209	1,193	1,230	1,285	1,324	1,351	1,396	1,486	1,473	1,514	1,555	...	...	...	...	...
1967...	1,593	1,659	1,718	1,707	1,780	1,827	1,881	1,918	1,94								

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## ALPHABETICAL INDEX—SERIES FINDING GUIDE

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Personal compensation	685	See Compensation.				Personal—See Civilian personnel and Military personnel.					
Personal—See Civilian personnel and Military personnel.						Procurement, Defense Department					
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Gross national product	200	5	14	10/77	10/73	Defense products industries	680	9	...	7/71	2/73
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Gross unpaid obligations outstanding—See Obligations outstanding.						Ratio to shipments, defense products industries	690	12	...	11/72	2/73
						Unpaid obligations outstanding—See Obligations outstanding.					



